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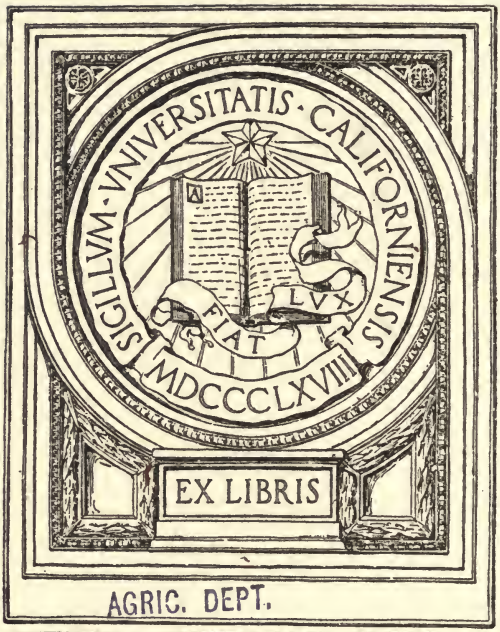
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CHROMO EDITION.—NO. 2 OF THE SERIES OF AMERICAN BREEDS.

WYANDOTTES:

SILVER, GOLDEN, BLACK AND WHITE.

Their Origin, History, Characteristics and Standard Points; How to Mate, Judge and Rear Them for Exhibition and Commercial Purposes; with a Chapter on Their Diseases and Treatment.

BY

JOSEPH WALLACE,

Author of "Barred and White Plymouth Rocks," &c.

ALBANY, N. Y.:
FERRIS PUBLISHING COMPANY,
1891.

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INTRODUCTION.

The popular adage, that we "Cannot have too much of a good thing," is verified by the unprecedented popularity of the Wyandotte family, as it increases in numbers, influence and beauty. In offering this new work to the Wyandotte breeders of America, as a *larger* companion to our Plymouth Rock monograph, we make no apology for its appearance at the present time, as the title page of the latter bears the announcement of the coming of a series on "American Breeds."

The Wyandotte family has outgrown the environment of small and early-written works. The monograph on "The Wyandotte Fowl," written by Mr. Felch and the writer, for the Ferris Publishing Company, seven years ago, fails now to satisfy the breeders and admirers of the Golden, Black and White varieties, because it treats *only of the original laced breed.* The addition of three important members to the family, necessitates a *new* and *larger* work and this has been produced in the one now presented to the Wyandotte breeders of the New and Old Worlds.

We trust that the breeders and admirers of the four Wyandotte varieties, which are described singly and otherwise fully treated of, considering the limited space at our command, will largely profit by the perusal and study of this work. Although this book is gotten up in the popular and pleasing style of the Plymouth Rock work, *it is more than one-third larger* and the subjects are more varied, more thoroughly discussed and more comprehensive. It is *new* and *fresh* from beginning to end, and one variety does not suffer at the expense of another.

270410

HEMLOCK LAKE, N. Y., *August* 7, 1871.

Dear Sir—I was at Lima last week and saw some Sebright chickens that were hatched from eggs obtained from you.

I have a nice lot of the same breed, and wish to get two cocks to cross with my hens, as mine are all related. If you can spare those that are well marked, with double or rose combs, that will make good size cocks, you may send them to me. I am particular about the comb, as mine are rose combs and I do not wish to breed them single. Write me if you have them to spare and at what price.

Yours truly,

REV. MR. BAKER. JOHN P. RAY.

Endorsed on the back of this letter is the Rev. Mr. Baker's reply.

J. P. RAY: HONEOYE FALLS, *August* 28, 1871.

Dear Sir—I have no fowls to sell. I think you could get two cocks of Rev. Mr. Benson if you would apply soon. Mr. Benson would probably want $1 each.

A. S. BAKER.

Evidently single and rose combs appeared in the early Sebright Cochins, as the single comb has done in some broods since the Silver Wyandotte was admitted to the Standard. This feature appeared in two separate broods, which we reared seven years ago, and the eggs were purchased from two breeders in the state of New York. The birds with single combs were much lighter in plumage, and the lacing showed a very close resemblance to that of the Silver Spangled Hamburg.

Thus we see that Messrs. Ray, Baker and Benson were in possession of the foundation material of the Silver Wyandotte in 1871. The following year a cut of one of Mr. Ray's birds appeared in the *Rural Home*. The same and following year he sold some of his stock to Messrs. McMillan, Dudley, Whittaker and Hull. The subsequent cross on this foundation blood was a Silver Spangled Hamburg and Dark Brahma. No pea comb appeared until after this cross of 1876.

After the Sebright Cochins had been bred some years by several breeders in New York, Michigan and probably in other states, Mr. Payne, of Binghamton, N. Y., advertised his fowls in the *Poultry World* in 1874–75. In 1876 this breed was presented to the American Poultry Association, at Buffalo, for admission to the Standard under the name American Sebrights. This type was from a cross of the Silver Spangled Hamburg and Buff Cochin. It was conceded that this fowl was much superior in type, beauty and usefulness to the Sebright Cochins, while other parties had been at work to obviate the faults of the latter, as the lacing was too light and too indistinct to merit being called laced. Single combs

appeared with rose combs, feathered with smooth legs, bluish white with red earlobes, and blue with yellow legs. It is said that a black fowl of the Breda breed was introduced in the crossing to enrich and give permanency to the lacing, and the two productions being crossed, formed the American Sebrights.

On the presentation of the American Sebrights, the American Poultry Association acknowledged the promising merits of the new breed, but objected to the name on the ground that it was suggestive of Bantam. They knew, too, that several types of the new breed were being cultivated, and that the admirers of each were desirous of giving new names. A new cross of Silver Spangled Hamburg and Dark Brahma now appeared, and it was much in advance of the other crosses in type and desirable qualities, although it possessed a pea comb. One party earnestly advocated single combs. Mr. Whittaker was in favor of rose combs, and Mr. Kidder strongly pressed the advantages of a pea comb. The petition was so far considered that Mr. Payne was appointed chairman of the committee to settle on a name and standard for the breed; but the committee failed to make a report and the American Sebright had to wait till 1883.

Happily the delay prompted improvement, and the product of the Hamburg and Dark Brahma, with the best of the other crosses, evolved a more pleasing plumage and type, which appeared under the name, Eureka. The combination of the two original crosses, with the last named, formed a desirable breed; and from that time on they grew in popularity and their sales became really marvelous, though advertised as American Sebrights, Excelsiors, Eurekas, Ambrights, Columbias, etc. In order to harmonize and settle on a name, Mr. I. K. Felch suggested the name Hambletonian and prepared a standard, which was the basis of the one made for the breed at Worcester, Mass., in 1883, when it was admitted under the name, Wyandotte.

Mr. Fred. A. Houdlette, of Waltham, Mass, an enthusiastic fancier and admirer of the new breed, suggested the name Wyandotte, after a tribe of Indians, but possibly out of some inspiring recollection of his father's ship, which was named "Wyandotte." However, the name was a surprise, and the pill which the fanciers of the country had to swallow was somewhat disagreeable, though perplexed and confused by the number of names attached to the breed.

Doubtless, much of the enthusiasm and excitement over the Silver Wyandotte was due to the little booms which the fanciers of

the different crosses tried to establish on the appearance of their favorites. Another factor of their popularity, which has escaped public attention, is the trouble and perplexing disappointments which followed the breeding of Plymouth Rocks to uniformity of color and matching in the show pen. The Wyandotte was hailed as a relief by those who had not been very successful with the other breed; the plumage of the Wyandotte being unique, their size, laying and table qualities being much in their favor, they soon shared a measure of the popularity lavished on the Plymouth Rocks.

The Wyandotte met a hearty welcome in every stage of its transition. American fanciers began to take an interest in new breeds of American origin. The Plymouth Rock was a grand success, although its color is much against it as an ornamental or fancy breed; the Wyandotte, on the contrary, showed promise of becoming a handsome fowl, when the skill of the fancier had brought it up to standard requirements. Hundreds engaged in the breeding of Wyandottes before the breed was admitted to Standard honors; and so enthusiastic were the admirers of this noble breed that Messrs. Arnold and Houdlette published a standard for the breed in advance of the American Poultry Association.

The favorable qualities of the Silver Wyandotte have come through judicious crossing and improvement of each cross. After the first experimental cross, there was no haphazard crossing afterwards. The Asiatic, with its large frame, robust constitution and quiet nature, transmitted these desirable merits to modify the nervousness, sprightliness and non-sitting trait of the Silver Spangled Hamburg. On the other hand, the Hamburg has transmitted a share of its precocity and prolificacy, besides exterior points. The original crosses served to modify the Asiatic characteristics, and these, combined with the Hamburg–Brahma cross, established the "happy medium" now characteristic of the Wyandotte.

The original combination would probably create a very good breed in time, if left to itself and the skill of fanciers; but being reinforced with fresh material of a better quality, the modification and improvement became more marked, and the objectionable points of each being largely bred out, all harmonized in one grand whole. It is almost certain that the originator had a laced breed in mind, and that the lacing of the Sebright Bantam was the ideal in view, excepting the tail and hackles, which were to be black and black laced with white. However magnificent the ideal, few birds have appeared in late years that could be called Sebright laced.

Some writers think that a Silver Polish fowl was a likely element in some of the crosses, but there is not the slightest foundation for this opinion, because some of the points of the various breeds in the combination have appeared at one time or another, but no crested chick, none with bifurcated comb, none with cavernous nostrils, and these could not be wholly bred out in so short a time. If some advanced fanciers look on the Silver Polish hen as the ideal for the Wyandotte hen, in lacing, that is no sign Silver Polish had anything to do with the plumage of the Wyandotte. Seeing so few hens of Sebright lacing, that of the Silver Polish can be more readily attained by adding a solid black tail and a Dark Brahma hackle.

It is useless to dwell on the object of the originator of Sebright Cochins. We hardly think he had a variety of Cochins in view, by using a Bantam, and it is doubtful that he sought to make a Cochin Bantam, because he ceased further reduction of size. In all probability a medium-sized fowl was the ultimate object, but the white ground color and black lacing of the Sebright were wanting; the whole plumage presented a yellowish cast, being rather a mass of lacing, penciling and mossing; too light in both sexes to be attractive and pleasing.

At this crisis in the breed, it was deemed advisable to fix a preponderance of black without changing other features, in order to make the lacing distinct. The black fowl of Breda blood, mentioned by Mr. Felch, offered a very suitable cross on account of its flesh qualities and unique comb, but the addition of the Brahma cross left the breed in a condition which would favor either the lightness of the Hamburg plumage or that of a dark plumage with white centers, as the partiality of fanciers should dictate. Breeders found much penciling and mossing in place of clear and distinct lacing in the light-plumaged birds. Mr. Felch always advised to make black the preponderant color, as the tendency of the breed was to light plumage, and we frequently advised the same thing.

When we take a retrospective view of the Wyandotte, we are surprised at the unprecedented boom it had, both before and after its being admitted to the Standard. No breed up to that time had ever been in such demand; perhaps no breed will ever enjoy such a boom. But, with its popularity was created a greed for gain; wretched specimens were put on the market, together with every speckled fowl having a rose comb, which rapidly lessened their popularity. A few far-seeing fanciers held on to their stock and denounced jobbers and unscrupulous breeders for putting on the

market such fowl; advised cöoperation in breeding high-class standard birds and exposing frauds. This, together with the confidence of their admirers, won back their former popularity, and now it is universally conceded that it rests on a foundation as permanent as the everlasting hills.

GENERAL CHARACTERISTICS.

The value of Wyandottes rests not alone on their comely appearance, good size and excellent flesh qualities, but also on their fairly good laying merits and quiet disposition. By common consent, they are called handsome; both male and female claim their respective shares; still, the peculiarity of their lacing and penciling will admit of greater improvement and perfection in all points. They are scored too high at present by all judges, perhaps owing to the reason that there is no ideal standard in their minds to which the specimens should approach. There is much of the surface of the body, thighs and rear part of the hen's back that needs improvement to correspond with the head, neck and breast.

There is no question regarding their usefulness, as that is conceded by all breeders who have given them proper attention and compared their merits with other breeds. Indeed, there are some well meaning fanciers who make extravagant assertions of their superiority over all other breeds. Such statements must be taken with many grains of allowance, as they are not equal to the Dorking, Houdan and Game in quantity and quality of breast meat, and not equal to the Leghorn, Minorca, Hamburg and Red Cap in egg production; but when we make a comparison with either of the breeds named, on the basis of general usefulness, that is, an all-round, general-purpose fowl, fulfilling the desires of the farmer, cottager and fancier, the Wyandotte is to be preferred.

There are many reasons why the Wyandotte is so popular in this country and Great Britain, though possessing scores of good breeds. In the first place, the lacing is unique; the size and weight is the most desirable for market; the carcass has not the grossness, coarseness of flesh and heavy bone frame of the Asiatic, nor the light and spare body of the small varieties. The color of the flesh is much in their favor, as the majority of our fowl consumers prefer yellow skin to pale color, as it suggests richness of meat. Whether this notion of color in the flesh of breeds adds to its real value or not, we will not discuss; so long as people hold that notion, anything contrary to it might not change or benefit any one. If the

eye is satisfied in color of flesh, it is very likely that the palate will share some of its satisfaction. However, the flesh of the Wyandotte is generally praised for its flavor and sweetness. Of course, it has not been tested so thoroughly by judges as that of the Dorking, Houdan, Langshan and Game; but all fanciers of the breed accord in pronouncing it a splendid table fowl.

Egg production is a very valuable quality in Wyandottes. To be sure, every experienced breeder knows that no breed of fowls possesses all desirable qualities. A breed may be handsome in plumage, faultless in type and carriage, and an excellent layer; but, if we desire to unite splendid table qualities, kind disposition, domestic habits and other merits, to the other qualities, some of the former would have to be sacrificed. We can get, and we have got, all these in some breeds, but they are not highly developed; they are mediocre, and they do not excel only in one or, at most, two special qualities. There is no question but what Leghorns, Hamburgs and Polish, properly cooked, are good enough for a royal feast, yet they are not the equal of the Dorking in point of table merits. We are speaking of prime merits here; fowls are not excepted from the general laws governing animated nature, as all living things may possess some high or transcendent quality individually, but none possess all in a high degree.

The Wyandotte, although not excelling in any special quality, is the happy possessor of an even and well-balanced organism, which makes it preferable to the majority of breeders over breeds excelling in some points and deficient in others. It is the equalization of useful qualities in the Wyandotte which makes it so popular; there is no excess of one quality at the expense of the other; a "happy medium" is established, and that goes to guarantee a higher improvement in all, with time and skill. None of our standard breeds has so many different elements in its make-up, and to these may be attributed the medium qualities which the whole family possess, as there is a check on any characteristic exceeding due bounds, so to say, by opposite characteristics of one or more of the composite stock.

The type and plumage of the Silver Wyandotte are much in their favor. The type approaches that of the Dark Brahma in a modified way. This, we believe, was the one most in favor by the leading breeders and judges, as it would not be judicious to trench on that of the Plymouth Rock or Java. Type is an accepted index of distinction in breeds. Originally, it was a short step between the Brahma and Cochin, the Plymouth Rock and the Java, but the

object of breeders is to give each breed a distinctive type. One can see in the Wyandotte the bold, erect form of the Brahma, especially in the male; the high rump and tail, the full neck, the face, the fluff and heavy stern; also the shank, although featherless, is the limb of the Brahma, as also is the beak—indeed, the general structure is that of the Brahma, with just such modifications as the Hamburg cross would give.

The primary object with this breed, as stated before, is to obtain a well-made, compact and blocky bodied, clean-legged fowl, of as large a size as is considered suitable, clad in the garb of the Silver Sebright; that is, as near as can be obtained in most features except tail, which is black, or should be so; but a great many cock birds have their primary sickles edged with white, and the edged sickles are invariably accompanied with clear markings on rump, as opposed to sooty or rusty saddle and entirely black sickles.

The comb, being a low rose, admirably fitted for our cold winters, is a valuable feature in the breed. In good specimens, it is narrow, and partaking of the curve of head. It is hard to get a good comb, and considerable deviation is seen in a lot of cockerels—in one you can see a shapeless, wide comb, in others the Hamburg spike and more coroneted comb; but the narrow and close-fitting comb, curved with shape of head, is the desired object.

As sitters and mothers, the Wyandotte hens will perform their duties faithfully. They are steady sitters, and very few will desert their nests after the work of incubation begins. They are not quite as industrious foragers and scratchers as the Game and common hens, but, otherwise, they are kind mothers. They are not so restless and nervous as the small hens, and, having a strong dash of Asiatic blood, they do not lead the young far away, nor exert themselves in diligent search for food. There is a quiet and contented feeling in their nature, which insures confidence in the young, though they may be from a restless and shy breed. This is of small import, as the majority of fanciers now coop the mother hens.

The Wyandotte is unquestionably a splendid breed and holds first rank among American fowls. It is a breed that commends itself in various ways, *utility* and *beauty* being two of its chief recommendations—two good qualities in combination; essential properties which no real fancier is disposed to ignore, nor which, indeed, in the interests and progress of poultry culture, should be overlooked or underrated.

DESCRIPTION.

THE MALE.

HEAD.—This section is independent of comb, ear-lobes and wattles. It is the part which embraces beak, arch and crown; these give a definite shape to the head. The configuration is decidedly Cochinish, with just such modification as to relieve it of the heavy eyebrows of the Cochin; but still it shows a beetling brow, which is also noticeable in the female.

BEAK.—This does not differ from Asiatics or Plymouth Rocks in form. It is yellow, with a heavy stripe of dark horn color shading the upper mandible, the yellow showing on the point and lower edges.

FACE.—This is a deep red color, rather than bright. The eyes are bay; ear-lobes red, well developed and folding where they curve; comb is bright red, rose in form, being low and flat, somewhat narrower at the base than top, with less prominence of spike than that of the Hamburg—the comb following the curve of crown to back of head, and the surface evenly corrugated; wattles are bright red, medium size, and hang below a line with ear-lobes; plumage is smooth, short and silvery-white in color.

NECK.—This is short, well arched, and abundantly supplied with hackle; the plumage of hackle is silvery-white, heavily striped with black down the center of each feather, and tapering to a point at the extremity. A good Dark Brahma hackle is the ideal to attain. The silver edging should be free from smut or black lacing—a common, and, I might say, a general fault, is the outer edge of the lacing near the point being penciled with black.

BACK.—This should be short and broad, and appear flat across the shoulders; the plumage is silvery-white on surface, and should be free from brown; under-color is slate, but the webs are frequently tinged with straw-color, and difficult to breed out; saddle is full and broad, and preserves a concave sweep from back to tail; plumage is silvery-white, with a black stripe running through the center of the feathers, same as in hackle.

BREAST.—This should be deep and round; under-color of plumage slate, web of feathers black with medium-sized white centers, which taper to a point near the extremity, the white increasing in size with the prominence of breast.

BODY.—This should be short and deep and suggestive of being blocky in appearance; the under-color of plumage is slate, and the

web of feathers black, or black slightly frosted with white; fluff full at the sides and posterior, which gives the bird a heavy appearance; plumage is dark slate, powdered with gray.

WINGS.—This section should be medium in size; the primaries black, with outer web edged with white; secondaries black, with outer half of lower web white; wing coverts, upper web black, lower web with a narrow black stripe along the edge, which widens toward the tip and forms a double bar across the wing; wing-bows are silvery-white, and the shoulder coverts have slate under-color and the web white.

TAIL.—This is full, medium length, well spread at the base and well filled in with black, curling feathers; sickles are of medium length, nicely curved and glossy black in color; tail coverts are glossy black, and the lesser coverts are black, or black with an edging of white, following the color of saddle.

LEGS.—These should be medium short, stout and well set apart; the thighs covered with soft feathers, color black or black powdered with gray; shanks rather short and stout, free from feathers, and in color bright yellow; toes straight and well spread, and same color as shanks.

STANDARD WEIGHT.—Cocks eight and a half pounds, cockerels seven and a half pounds.

THE FEMALE.

HEAD.—The configuration of head is the same as that of the male, but smaller, and the heavy brow is more modified.

BEAK.—This is in form, color and shade same as in the male.

FACE.—This is a deep red color; the eyes are bay; ear-lobes red, well developed and folding where they curve; comb is bright red, rose in form, being low and flat, smaller than that of the male, and following the curve of crown and back of neck, the surface evenly corrugated; wattles are bright red, medium size and hang below a line with earlobes; plumage is silver-gray.

NECK.—This is short, well arched and abundantly supplied with hackle feathers; the plumage is silvery-white, with a black stripe through the center of each feather, and tapering to a point at the extremity.

BACK.—This should be broad and short and appear flat at the shoulders, and slightly cushioned; the plumage has small white centers, and free from outside white lacing; under-color dark slate, and web black.

BREAST.—This should be full and round; under-color slate, web of feather white, and each feather distinctly and evenly laced with black, the white increasing in size with the prominence of breast.

BODY.—This is short, deep and round at the sides; the under-color is slate, web of feather black, with a narrow white center running into black, or black frosted with white, along the thighs. The body is too short; a longer one would indicate greater value in the line of egg-production. The fluff is full, and gives a heavy appearance to the posterior; color of plumage is dark slate, powdered with gray.

WINGS.—These are medium size; the primaries are black, with lower web edged with white; secondaries black, with the outer half of the lower web white; wing and shoulder coverts are dark slate in under-color, the web white and heavily laced with black, the black lacing growing wider over the wing-bow.

TAIL.—This is full and well spread at base; the color is black; the greater coverts black; lesser coverts black, or black with white centers, though usually slightly penciled with white.

LEGS.—These should be medium short, stout and well set apart, the thighs covered with soft feathers, color black or black powdered with gray; shanks rather short and stout, free from feathers, and in color bright yellow; toes straight and well spread, and same color as shanks.

STANDARD WEIGHT.—Hens six and a half pounds, pullets five and a half pounds.

REMARKS.

We have adhered quite closely to Standard description in the above, without using the same words, and, for all practical purposes, it will aid the novice in committing to memory the standard requirements of the breed under consideration, until such time as he finds it necessary to mate, judge and prepare birds for exhibition and sale, when a "Standard of Perfection" will be indispensible, so as to have an authoritative work to guide him, not only in the culture of Silver Wyandottes, but also in all other recognized breeds.

One cannot, however, glean from the Standard an ideal of the breed it describes. The facial appendages, color and marking of plumage, legs, and, in fact, all points, are described quite minutely, but the type of the breed no words can express sufficiently clear to give a correct ideal. This is especially true of the Silver Wyandottes.

The white variety, however, is in better luck, since the White Wyandotte Club has accepted old "Silver King" as the type for White Wyandottes, as this bird was pronounced by judges and breeders as the best representative of the race which has ever come before the people.

The Silver Wyandotte was given its present type because it did not trench on that of the Plymouth Rock, Java, Dorking or other middle-sized breeds. The combination of Hamburgs and Dark Brahmas brought out its present type very nearly, and this was considered the best from the early crosses. It is, therefore, a modification of the American Dark Brahma type, with such toning as we might expect from the Hamburg. The Standard is pretty clear in most everything else, but the shape it cannot describe with sufficient clearness to enable one to form a correct idea, or the judge who depends solely on it. Judges may say, standard-makers may say, the Silver should approach the Dark Brahma in shape. This is not very clear, as some Dark Brahmas partake of a shape between the Cochin and the Light Brahma, particularly English-bred birds. The Silver Wyandotte male, in type and carriage, more closely resembles the Brahma, but, of course, of a decidedly refined nature, being sleeker and smarter, with a more clean-cut make-up; the female, however, does not closely resemble the Dark Brahma hen, and, therefore, there is no true ideal to breed to.

There is much improvement going on with regard to shape and size of comb. Some English, as well as American, fanciers, have urged the adoption of the Hamburg comb; but such a comb would be unsuitable for a large breed, and for one with a small and flat skull. The form of comb now seen on first-class specimens, and as delineated in our chromo illustration, is fairly good, if breeders will avoid breeding wide combs, which spread over the skull. We are no more justified in breeding a Hamburg comb than a pea comb, and it is better, for many reasons, that the breed should not follow either, but add enough of the Hamburg to the pea comb to make a neat, low rose, with a gentle curve from the nostrils to the back of head.

The novice will notice, when reading the Standard, the frequent use of the word "medium," in describing length, width and size. This is to be understood as meaning "mean" or middle state—between large and small, long and short. When understood, its use does away with much verbosity, and that is the only point in its favor. Although the Standard fairly well describes the Silver Wyandotte,

still, there is some ambiguity in the description of white centers and extent of lacing on different parts of the plumage. One cannot judge correctly by the cuts which appear in poultry publications, as the plumage is made darker than it really is in the living specimen.

There are some other questions which we will take up in the chapter on *Mating* and *Judging*, as we have transcended our limit in these remarks. The Standard, before the last revision, allowed breeders to sell birds with penciled feathers, and, while the same thing is being done nowadays, the Standard is clear on this point; we must have a black-and-white laced breed, with colors evenly divided, and no penciling.

STANDARD DISQUALIFICATIONS.

Any feathers on shanks or toes; permanent white or yellow in the ear-lobes, covering more than one-third of their surface; combs other than rose, or falling over to one side, or so large as to obstruct the sight; decidedly wry tails; deformed beaks; crooked backs; shanks other than yellow in color, except in hens, which may shade to light straw color; solid white breasts.

SCALE OF POINTS FOR WYANDOTTES.

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Condition	6
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Comb	8
Wattles and Ear-lobes	6
Neck—Shape 4, Color 6	10
Back—Shape 4, color 4	8
Breast—Shape 5, Color 5	10
Body and Fluff—Shape 5, Color 3	8
Wings—Shape 4, Color 4	8
Tail—Shape, 4, Color 4	8
Legs and Toes	8
	100

MATING SILVER WYANDOTTES.

Mating fowls of any breed is the most important part of poultry culture. This cannot be questioned, and it should be remembered by every person keeping fowls. A good cock or cockerel to head a pen is valuable. On his vitality, virility, natural force and

power of stamping his good qualities on his offspring, depends his value. The prime breeding male will not only show a well balanced organism, which will make him handsome, with a full development of physical qualities, but he will also be combative, ambitious of mastery, attentive to his harem, quick, amorous, and in good condition of health and plumage; the last is indicated by his bright and fearless eye, rich red comb and wattles, sleek and glossy plumage, and sprightly movements.

A male with stilted legs will not make a good breeder, nor the one with hock joints pressing inward or backward, nor the one with joints lacking firmness, nor the one with legs close together, or crooked, nor the one with slim thighs, as they denote an uneven formation of structure—an imperfect balancement of limbs. Avoid a bird with narrow breast and back, for such a male lacks muscle, and has not sufficient room for development and healthy action of the vital organs; avoid the one with slow motion and of cowardly nature; one with loose plumage, scant hackle, saddle and tail, and the one that is too large, too fat and too clumsy, as it will fail in sexual duties.

This is no guess work, but is based on experience and study of the laws of breeding. A clumsy or over-fat male is not to be depended on. Obesity is ever antagonistic to fertility, as it really impairs the functions which inclose and transmit the vital spark of procreation. The greater number of the large-sized breeds, fattened to reach standard weights, are not in proper condition for breeding while retaining superfluous fat. This is one of the chief causes of complaint about non-hatching eggs. The male or female should be in fairly good condition of flesh, without being fat. The best breeders are those under standard weights; the male or female that will reach within a pound or so of standard requirement, without extra feeding, is far preferable for breeding to one forced to standard weight by special feeding.

As a rule a good breeding male will be a frequent and vigorous crower; will talk with his mates a good deal; will lead them into the by-ways and "pastures new;" stopping at times to perform a *pirouette*, with the wing lowered, and making a rasping noise against his leg. He will stand at the head of his flock, always exercising proper activity and vigilance. Such a male is competent to mate with six or eight hens. Chickens from such a mating will be apt to take after their sire; and fortunate for the breeder, if he has descended from a long line of good layers.

Another important point to bear in mind is the evil of continued in-and-in breeding. The majority of old fanciers know its bad effects, and seldom venture too far. On this point, all practical stock breeders, as well as the medical faculty, agree, that the ultimate tendency of breeding in-and-in is highly injurious; that when carried to excess it will always result in a loss of constitutional vigor and hardiness in the offspring, if not to the verge of sterility and impotency; that while its tendency may be in the direction of fineness of texture, lightness of bone, smoothness of plumage and limbs, neatness and uniformity of parts, it is invariably at the expense of stamina, robustness, strength and prepotent power. These things do not occur to the novice when he embarks in poultry culture; perhaps he does not give it a thought. He may be willing to abide by the apparent improvement which in-breeding stamps upon its issue, but he may not take into consideration that that improvement is wisely "improving his stock off the face of the earth," to make room for a more vigorous and hardier race.

Breeders are prone to place too much reliance on the male, and apt to overlook or entirely ignore requisite qualities in the female. It puzzles us to know by what art or course of breeding, either in oviparous or mammiferous animals, the male is so vastly superior to the female, in its part of stamping high and desirable merits. Science will refuse its assent to this unphilosophic hypothesis. Every day we hear some writer exclaim, "The cock is half the pen." He believes it; he has a right to his opinion; he formed it while breeding fowls, or has accepted it as gospel truth, because somebody else had said it, in whose judgment he places great reliance.

Our study of the laws of breeding leads us to the conclusion that the female contributes more elements of organism and internal structure than the male. The male gives the "spark of life" to the inert procreated mass; that is, its potency, spirit, life and complexion; the latter only when he is more potent in this quality, which is usually noticed in crosses; stamping his own color, complexion and leading characteristics with a hen of his breed is no sign of potency, because the hen would have given the color and features, and leading characteristics, to the male progeny, with another male of the same strain or variety, though perhaps in a less marked degree. If the cock is half the pen, then, there would be no necessity to select females with color, penciling, lacing, or facial appendages to modify or intensify points in the male, as is done in every carefully made pen, as he would stamp all individual points regard-

less of the controlling influence of the females. The male does no such thing, and it cannot be reasonably expected of him, as a higher power has decreed that the male and female, of all organic things, shall unite and share in producing an offspring like unto themselves or a controlling ancestor.

Far be it from us to underrate the value of a male bird in the pen, but we cannot accept and indorse the current opinion among fanciers, that all or nearly all of the high and distinguishing qualities of the offspring are due to the male. We have already transcended the limit of space intended for the subject of mating, but as the whole season's success or failure depends on the breeding pen, the suggestions may be beneficial to breeders, if they will bear them in mind and scrupulously observe them when making up their breeding pens. *The suggestions offered here will apply to all other Wyandotte varieties*, and save us making special remarks on the breeding fowls; *color being the only exception.* In fact, our remarks will also apply to every standard or non-standard variety.

SPECIAL MATING.—The breeder should bear in mind that Silver and Golden Wyandottes lose color by age and breeding, if no selection be made annually. The Silvers have shown a tendency to lightness of plumage from the beginning; so the amateur fancier is forewarned in time. Pullets nicely marked will, in the second or third year, moult lighter, and there is no other way of securing color in the breed than by mating either male or female a little darker in plumage than is described in the Standard.

The novice may be puzzled to account for this mode of mating and ask, "Why not mate standard birds together for the production of a standard offspring?" The breed has not been bred long enough to establish a line of standard birds for breeding; and being made up of crosses, each color struggling for mastery or controlling influence, special matings will have to be followed in the majority of cases, and two breeding pens, for the production of cockerels and pullets, have already been adopted by some fanciers.

If one could secure standard birds, one pen mating would suffice. Some years ago Plymouth Rock breeders were troubled in the same way, and many had recourse to two pens to produce standard cockerels and pullets. The novice must not be led by the cuts which he sees in poultry journals, to think that the plumage is as dark in the living specimens as it is represented in the illustrations.

The proper rule to follow in breeding Silver and Golden Wyandottes, is to establish a line of standard breeders as soon as possible

and give up the special mating. With the Silver Wyandottes one learns that the male should have density of color; or in other words, be darker than the Standard demands, because the male has more controlling power in color than the female; one with a light breast should not be used, except there is no alternative in the matter, and such a bird ought to be mated with hens quite dark and showing small white centers.

To establish a line of breeders one must begin with a dark male, even if he has a dark breast to the extent of appearing black when viewed in front, if other points are desirable; select a cock between seven and a half and eight pounds, with good limbs, stout, short and set well apart; nice head with a broad crown; comb, wattles, neck, back, body, fluff, wings and tail of desirable quality and as near standard requirements as can be had. Right here we will add, it is color that is the real object of this mating, and if the black stripe on the hackle is broad and dense, or if the black runs along the sides of the white, do not discard him on that account; or if the silvery white on head, back, saddle and wing bows, be plain silver, though faulty, still it will serve its purpose here.

The breast, body and thighs must be darker than the standard requirements. The breast should be dark, if not quite black, at the throat, the white points merely visible in the center as it merges to the body, but when ruffled or parted will show narrow white centers, growing larger as it approaches the body; the body and thighs quite dark, and fluff dark slate.

Such a male is darker than standard requirements, and this is needed to give color to the offspring, not for one season, but for establishing a permanent line of breeders. The hens mated with this male should be medium light, lighter than standard hens, if they show a good hackle, and white centers on wing bows, free from black penciling. Hens that have been near standard color when pullets, and become light after moulting, make suitable mates. Do not discard them if they show open centers, even to spangling on breast—open white centers on saddle, and show light in fluff and tail, and be what is called light specimens in color, if other points are desirable.

This mating transfers, compensates and modifies, because it is extreme mating and seldom resorted to, except in new breeds that have other elements in their composition, and not bred long enough in a direct line, to have established permanency in colors. If standard females were mated to the male in question, the female offspring

would be too dark; but in this you will have cockerels that will intensify the color of light pullets, darker than the dams, by selecting one like the sire. The pullets mated to their sire, and the dams to one of the cockerels, like the sire, the pullets of each mating the third year will be the ones to select for the breeding pen, as they will have prime color, and will fall but little short of standard requirements; and the cockerels, the product of the old sire and the pullets, should be at the head of the pens. Mr. Felch recommends a similar course of mating in the start to secure a line of breeders, and is in substance somewhat like the one we have suggested.

MATING No. 1.—We are indebted to Mr. Felch for the following: "A male, like our original described sire (the one Mr. Felch has reference to, is described by him too fully to repeat here, but in substance that sire does not differ much from the one we have commended), except that the breast be black, with small white centers, thighs stone color, with fluff dark stone color, approaching black.

"Mate pullets weighing full five and three-quarters to six pounds, full breasts, plumage of same fully laced, yet the white center of good size, and to grow smaller in the plumage and the black lacing wider as it approaches the tail, when it merges into a full black tail and stone colored fluff, with thighs nearly black, beak and shanks yellow, comb as described in the ancestor's. This mating to produce one line of sires, and no sire should be used from any other mating, if we hope to see this breed reach that accuracy and uniformity of breeding we see in Light Brahmas.

"MATING No. 2.—A male that has the form of structure consistent with standard requirement, and good clear color, save, I care not how black he be in breast, wing bar and tail, with dark stone colored fluff. With such a mate the pullets that look well from a distance, but show breast off in color, the lacing having crescents, the white in the middle of web of feather reaching the outer edge, with wide white center, penciled in the cushion plumage, and having light colored fluff and legs. (Mr. Felch uses the word stone color frequently, and it is intended to convey to the mind a certain shade of blue-black, like the bars on Plymouth Rocks.)

"MATING No. 3.—Cockerel having a pure silver colored lacing and neck, back nearly white, silver-white laced breast, with wide center, gray thighs and breast, wing bars, if possible, with the color described, gray fluff, tail black, beak and legs yellow.

"Females with dark heads and beaks and dark hackles, back and cushion nearly black, heavy laced breast, body and thighs, and fluff

black. Males from such a mating should be killed as broilers. The standard colored pullets from such a mating will make good mates for standard-described male for mating No. 1."

The best mating, all things considered, is medium colored females and the male showing small white centers, one that is called a dark cockerel. There will be enough of color in him to give the female offspring standard color, and the males will be just right for breeding. We have placed much stress on color, because the lacing should be metallic black. Endeavor to breed out penciling, if it appears. If the color is secured in both sexes, one has achieved the most valuable and important point; coarse and wide combs, and the absence of the double wing-bar, may be the next effort to improve.

GENERAL MATING.—This is to be considered in its proper sense, for we cannot be too careful in the selection of our sires and dams. Do not, if you can possibly avoid it, mate light colored males; their offspring cannot be trusted, though with certain matings they may be standard; a watchful care and selection is needed for several years, no matter how fine they may appear. The males from a light sire, if used at all, though showing standard color, should be mated with dark hens, for the reason that he controls the color, and in the second or third generation is apt to transmit the lightness of his sire.

The reason that Mr. Felch and other experienced writers give such mating as No. 3, is that some breeders may not have dark males, but plenty of dark females, and that, owing to one cause or another, had not, at breeding time, dark or even medium light males, and were obliged to use the best they had. A breed so popular as the Silver Wyandottes, and in the hands of experienced and inexperienced persons, must be expected to breed in every way but the most desirable. The oldest of our breeds produce a large per cent. of non-standard birds, and every spring there is more or less selection and skill necessary to breed them to standard requirements.

Of course, the novice is aware that the males and females mentioned in these matings as off in standard color, are desirable in other points, and if of proper color and lacing would be good birds and scale high. This should be understood by the young beginner, and if the male or female show any deformity of comb—too large, or following the form of the Hamburg, Dominique, or Dorking, or other flagrant faults, and off in color, too—such birds are not fit to breed from; but if other points are fairly good, the comb or other fault can be improved by mating one or more with small combs of

proper shape with the bird that has a deformed comb. It is the same with hackles, breast, back, wings, tail, legs, etc.; whatever is deficient in one should be a little in excess in the other, so that the mating of such birds may give the offspring the feature in a modified form.

Color and comb are the most difficult points to get good. The novice may not have visited a leading show, to form in his mind what the male and female Silver Wyandotte should look like in these two particular features. The Silver Wyandotte cock has much, if not all, the color and penciling of the Dark Brahma, differing in breast and wings. The hen is, in plumage, much like a well-laced Polish hen, but differing in tail. In fact, the Polish hen would be a very good ideal, as far as lacing is concerned. The comb should be a neat rose, fine, evenly corrugated, with a spike much shorter than that of the Hamburg, closely following the curve of the crown and bend of neck.

Speaking of mating, Mr. J. Penfold Field, author of a small work on Wyandottes, published in England, says: "This breed, more, perhaps, than any other, has the tendency to breed light, and for this reason alone we should never breed from light males. We must always remember that males influence color more than females.

"A standard male, with breast lacing not very wide, is the lightest we should ever use for breeding purposes, if we wish to place any reliance on our future stock.

"Of course, the best mating of all is the happy medium, when we put full standard males to full standard females; but it is not many of us who are fortunate enough to have such birds to mate together, and we must therefore do the best with what we have.

"Many of the females fail in breast, having moon-shaped spangles instead of lacing. They will also be light in fluff and white in tail. To such birds we should mate a male that has been bred from standard hens, and that is up to standard in every point except breast, and this may be as dark as possible; even if pure black, it will be better, for such light-colored females, if mated to a standard bird, would scarcely breed a good chicken. Another style of females that many of us have are those which have perfect, heavily-laced breasts, but are too dark on back, cushion and wings. To such we must mate the lightest shade male that can be allowed by the standard. In all matings we must get the males with as clear hackles as possible, free from white in tail, and in the Silvers the wings and back should be free from brassy or brown feathers.

"The females must be as free from penciling as possible, but always give the preference to those standard birds that may be slightly mossed on cushion, before those non-standard birds with good, clear backs.

"Good pullets do not always grow into good hens, and as at least one-half the general run of matings will consist of second year's females, a word of warning will not be out of place: Do not discard hens that were good standard pullets, because they have moulted with spangled breasts—as a rule fowls breed to their first feathers—but mate these birds that have so faded, with a somewhat darker cockerel than you would use to a full standard female.

"Of course, whenever it is possible, use hens that have moulted to full standard form, and use the full standard mating.

"No matter what we may wish, think, or do, we cannot upset the first law of nature, "Like produces like," which, being interpreted as regards Wyandottes, means that standard males mated to standard females will produce standard chickens of both sexes. Exception proves the rule. I am aware that standard males and females can be and have been produced by matings other than this; but from no other mating is it possible to obtain such a large percentage of good chickens of both sexes, as from the mating in question.

"I cannot too often repeat, and I will be very dogmatic on this point, that light males should never on any account be used; I will go even further than this, and say that even standard males of the progeny of a light sire must be thrown out.

"This remark is also applicable to females, for no matter how fine a hen may be in her own personal charms, if she is the offspring of light, off-colored parents, she is nearly useless as a breeder and is certainly unreliable.

"The above questions as to mating include both the Golden and Silver varieties.

"UNDER-COLOR.—There is one other item that generally appears to be ignored in the mating of Wyandottes of all varieties—it is *under-color*.

"Now, possibly, I may be told that so long as the surface is all right, what matters the color below? Well, it only matters so much that it influences the whole progeny for generations. In the laced varieties this should be dark slate color, and were this always taken note of, we should not be troubled with the many off-colored birds that we are now.

"In White Wyandottes, under-color is the main secret of producing sound colored birds, for if this be not a pure white, free from any cream or lemon tinge, then it is just about impossible to get the surface color pure. The under color in Black Wyandottes should be dark slate, as in the laced varieties—but in many instances, on lifting the black feathers, they are found to be white at the root. This I can only put down to the influence of the yellow legs, for in poultry breeding yellow legs and black plumage do not go hand in hand, as one might wish to be the case."

Some breeders say it is not natural.

"I cannot travel quite so fast as this," continues Mr. Field, "because, so far as I can see, there is nothing artificial in a yellow leg. In Italy, where birds are not scientifically bred, Black Leghorns are seen with yellow legs. The percentage of good legged ones, I admit; the unnatural part of it, I do not.

"One thing is, however, evident, viz.: The lighter the blood, the larger number of good legged ones obtained; and this leads me to suppose that very little attention is paid to white under-color, so long as that white does not appear in surface plumage. In these self-colored varieties it is only right that more attention should be given to combs and leg color, than in the laced varieties; not but what these sections should be as perfect in the Goldens and Silvers; but a faulty comb in a White or a Black, should be more severely dealt with in selecting for show or breeding purposes; the same applies to shanks. The reason is obvious. In the Whites and Blacks we have not the various sections of mixed colors to breed for, and, therefore, having only one color to obtain, the difficulty should not be so great.

"Color faults in these two varieties are more often seen in the males—in neck, wings, back and saddle of the Whites, and neck and tail of the Blacks; but in the Black Wyandotte the most important point of all in mating is the quality of the shank. The tendency is to dark or yellowy-black, instead of bright yellow; and in selecting a bird for breeding, if we cannot get a perfect bird, we must use our discretion in choosing a bird sound in color but faulty in leg, or one perfect in legs and white in neck or tail. It must resolve itself into a question as to the extent of these two faults.

"The Wyandotte, as seen in England, shows many deformities of comb. They are generally large, heavy, deeply serrated, fleshy masses, following the White Dorking and Hamburg type; spikes all shapes, and straight out behind, or, may be, with an upward

tendency (just the reverse of its proper form), and the surface prominently displaying hollows of various sizes.

"In selecting for breeding, comb must be one of the chief considerations, and I shall always insist on a neat, fine, evenly corrugated one, the surface corrugations being very small or pimply, with a spike of moderate length, closely following the bend of neck.

"We cannot be too careful in the selection of our sires and dams, for not only will their faults or merits be seen in their own progeny, but a fault will frequently appear in the stock of later generations."

LAWS OF BREEDING.

"EVOLUTION."—As we have given much space to breeding in this work, we can devote only a few pages to this important subject, though it is the first time that such a subject, its scope and treatment, has been brought forward in a work devoted to poultry. The law of evolution, so far as it is understood, is a law controlling development and keeping types within appointed circles of growth, which revolve for ever upon themselves, returning at appointed intervals to the same starting point, and repeating, through a succession of phases, the same course.

"PREPOTENCY."—Is the power possessed by a bird of stamping his or her likeness upon the progeny of a union, to the exclusion of the likeness of the other parent. Some males have been remarkable, renowned and distinguished for such individual power, but experiments have proved that certain colors are more enduring than others, and are more readily transmitted. Most all breeders seem to favor the prepotency of the sire in externals, and, when the sire is white, his color is usually transmitted; but, when a Black-Red Game sire is crossed on Gray or Duckwing hens, the result is different. There is more or less counteracting influence in every opposite union, a sort of "see-saw" influence, or balance of male and female; this is as nature intended it should be.

A "BREED."—This is generally understood to mean a natural division of species, differing in certain distinct points from all other species. A breed may consist of several "varieties," agreeing in certain common features, but differing in others. Varieties are generally artificially produced, or they may be produced by different climatic or such like influences operating upon certain individuals of a breed. They may also be the result of a "sport," which is an accident or freak of nature, whereby is produced offspring differing,

in some important point or points, from the breed or variety to which its parents belonged.

A "STRAIN"—Is, properly speaking, a family, with established and recognized points of mutual resemblance.

"HERIDITY, OR ATAVISM"—Is the inheritance by offspring of the characteristics or likeness of their ancestors, more or less remote. The phenomena of atavism or reversion to ancestral characters, and the resemblance of offspring to a remote ancestor that differed in many respects from the parents, is little studied by the majority of breeders, and yet, many of the "sports" and off-colors which come suddenly in broods of pure-bred fowls, once in a while, might be traced back to some controlling ancestor.

The word atavism is from *atavus*, an ancestor, and, though the name is significant itself, it is better known by the names "reversion," "throwing back," "breeding back," to a long lost or forgotten character in the ancestor. Any peculiarity of an ancestor, either in organization, type, form, color, trait, etc., may be transmitted, more or less, however remotely, to the offspring, when favorable conditions lead to their development. Mr. Tallet, of Betley, England, crossed his fowls with Malays, and, though he attempted to get rid of this strain, he gave it up in despair, the Malay characteristics reappearing forty years after the cross was made. Professor Agassiz has remarked that the offspring is not the offspring of fathers and mothers, but of the grandparents as well.

Darwin has diligently labored to show that the evolution of species and varieties rests upon a triple foundation, which includes the law of inheritance, the law of variation and the law of selection. The law of inheritance points to that universal tendency in all forms of life by which it transmits and perpetuates its likeness; the law that "like begets like." The law of variation is declared to modify this law of inheritance; individuals in any species having an original and inherent power to vary slightly from the parent form, to transmit such variations by successive transmissions and accumulations, to perfect and fix such variations; and, finally, it is asserted that nature, or natural selection, provokes and pushes this power of variation, by that fearful struggle for existence, that wide-spread and remorseless conflict, under whose steady pressure each living form is forced to develop to the utmost, to retain and augment every slight advantage—a conflict that issues in "the survival of the fittest."

It is evident that Darwin makes the law of variation the scientific backbone of the whole system. His fundamental thought is,

that what we call species are only older varieties, and he justifies himself in this generalization by showing that, under the hand of man, by domestication and careful breeding, varieties may be produced that exhibit the marks of distinct species.

Selection breeding, then, is capable of inducing marked deviations from the original type. "But," Darwin argues, "if organic beings had not possessed an inherent tendency to vary, man could have done nothing. Man does not actually produce variability; he only, unintentionally, exposes his animals and plants to new conditions of life, and variability supervenes, which he cannot even prevent or check." That is, man only exposes the new form, but does not produce it. It must have been there potentially from the beginning; it is evolved, not created. Living forms must possess, not only the power to transmit their likenesses, but in favoring conditions to vary widely, to transmit and so perpetuate and fix the variations. In the wide field of nature, natural selection takes the place of man's selection; an immense advantage, in Darwin's judgment, as "man can act only on external and visible characters," while nature "can act on every internal organ, on every shade of constitutional difference, on the whole machinery of life."

IN-BREEDING.—We now come to the most important part of the laws of breeding, and which interests every breeder more or less. This question has been frequently discussed, and with few unimportant exceptions, the great weight of authority opposes and condemns this system, as fraught with the worst possible evils, even to sterility, when carried to excess. We have given much study to this subject, and know the many difficulties that come in the way of the novice to avoid it, but we do believe, and we are the only one, to our knowledge, who has put himself on record by saying, that long continued incestuous breeding, in the absence of heredity transmission, or reversion to ancestral characters, causes variation from the parent type, color and leading characteristics; and that some of the so-called "sports of nature," in animals and birds, could be traced to incestuous breeding.

If space would permit, we think we could prove this point. We hold, with Dr. Dawson and other eminent scientists, that the first of every species was exceptionally perfect; but we are, perhaps, alone in saying that variation never takes place while the natural laws are strictly observed, and all under like conditions; and the exceptions to this rule are mainly due to nervous impressions, or in other words, sexual impressions, which are transmitted to one or more of the offspring through the nervous system.

Some apologists of in-breeding, point with pride to certain strains of horses, cattle, sheep, swine and fowl, then refer to the pedigree and inquire triumphantly, "How can you produce in any other way, in so short a time, such splendid results? We, the advocates of this system, have practiced it openly; we have produced winning stock at the shows and have made money. That is enough. What is possible, practicable and profitable, is advisable." That is a short plea, and it does not cover the ground or close the case. The in-breeder is like the man who insures his house and then sets it on fire. When the fire gets under strong headway, he calls for the fire engine; so in the other case there is a call for *fresh blood.* But the home is liable to burn down! No matter—it is a quick way of turning it into money.

Speaking of in-breeding, an English authority says: "There is always a starting point for this system. Reference is always made to some wonderful sire as the great progenitor. Now, let us inquire, how was the great progenitor obtained? Was he the result of several turns of in-breeding? Was he, designedly or accidentally? What came of the union of two unrelated specimens, male and female, both possessing more than ordinary amount of good qualities, such as hardiness, symmetry, innate vitality and prepotency? People ought to know how these wonderful first parents came about, for they desire to come into possession of others. The fact is patent; these extraordinary specimens, that stand head and shoulders above their fellows, are the products of a long course of breeding and selection to be traced back thousands of years. They crop out here and there, sometimes unexpectedly; are not numerous, and if used according to the laws of nature and common sense, they tend greatly to accelerate improvement. If used in schemes of incest, they are about lost to their race, in the long run."

This subject would not here receive so much attention were it not for the fact that the evils of in-and-in-breeding are becoming more and more apparent every year in this country. And this is the way that decadence is effected. An enterprising, or we may say fortunate, fancier gets in his possession a very remarkable male bird, having the gift of what is called prepotency in a high degree, and he calls this valuable stock-getter Duke of Essex, Excelsior, or what not. Very well—he ought to have a good name. He breeds this fine cock with the best hen he can possess. Very well—a fine lot of chickens. The next year he puts this fine cock with his own pullets, and the next year with those that would be his grand-

daughters. In the meantime he exhibits and advertises, and the world finds out that he has produced the renowned Excelsior strain. He sells to A, B and C in different sections, men who want the best, and they pay him high prices. They also study the "art of breeding," and they learn that the grand secret is in-breeding; so they each commence the same process with their newly acquired stock. Each of them sells eggs for hatching, though they have a queer suspicion that the breeders do not lay well, and somehow there is a reduction in number and quality of chickens hatched, that does not correspond with prices paid. The few chickens hatched do not equal their great-great-great grandfather, on the *father's* side. There is something of a resemblance, but it is painful. An unusual vigor and prepotency is not easily blotted out. It is a great pity when all excellence is "bred out," and nothing is left but a name.

"NATURAL SELECTION."—The theory of natural selection and of "the survival of the fittest," is as follows: Birds, as other animals, in a state of nature select their mates partly on account of their superior strength, etc., and partly on account of certain beauties, pleasing to the eye. In addition to this, the weaklings of each brood die, and those the plumage of which is least adapted for concealment from predatory animals, etc., fall a prey to their natural enemies. In both these ways the strength of the stock is kept up, and a particular type of plumage (that most pleasing to the eye of the other sex, or that most suited for concealment from enemies), is perpetuated.

"ARTIFICIAL SELECTION"—Is entirely different and consists, in the first instance, in the arbitrary settling by man of certain features which he desires to perpetuate, and the perpetuation by artificial means of these features.

REMARKS.

The breeder is now in possession of the leading facts in the laws of breeding, and ought to profit by the information. There is yet much to be learned, and which still remains a stubborn mystery. It puzzles all to account for the variations which unexpectedly appear in flocks of fowls, as well as in animals. In a large family we seldom find all the children resembling either the father or the mother, and, in many instances, the resemblance to a grandparent or some more remote ancestor, prevails to so great an extent that the obvious peculiarities of the immediate parents are obscured.

It has been remarked that no two animals are precisely alike in

all details of the organization, no matter how close the relationship or how striking the resemblance; and in connection with this, it has been observed that instances occur in which individuals present an assemblage of characters quite different from those that characterize the parents. These have been explained on the supposition that there must be a law of "spontaneity," which is antagonistic to heredity, or that the law of heredity is not constant in its action, but limited by numerous exceptions.

JUDGING.

The Standard demands that all varieties of the Wyandotte breed be of one shape, and that all must conform to the type of the Silvers, on account of priority; it being admitted to the Standard and judged by its present type, therefore, it should have the preference in regulating the form of all subsequent varieties.

SYMMETRY—Is a mooted question among judges, therefore we will not discuss its value and usefulness in judging fowls; but no other word can express so concisely, intelligently and correctly its meaning. In considering symmetry, as it is generally understood, the male is judged more critically and severely than the female, and every defect punished more rigorously than the same in the female. This severity is due to the fact, that it is expected of the male to transmit external points in a greater degree, and therefore, every defect in symmetry is punished more severely in the male. Symmetry is the harmony of parts taken as a whole, and must be typical of the breed represented.

A male with a large head, long neck, long legs and long, bony body, would not be considered symmetrical for a Wyandotte, because each section is defective and cannot represent the type of the breed. For instance, if the comb be too large or badly shaped, it is cut from one-half to a point; if the neck be long and not well arched, it is cut a point; if the back be not flat, or if too long and out of proportion, it is cut a point; if the breast is narrow, wedge shaped or cut away in fullness and roundness, it is cut a point; if the fluff be scant and the bird narrow behind the legs, it is cut one-half to a point; and if the tail be drooping, it is cut one-half to a point. These faults make symmetry defective.

WEIGHT.—This is judged by the scales; in all breeds having weight clauses, except Bantams, two points are deducted for any deficit from the standard weights, or in that proportion for any fractional part of a pound.

CONDITION.—This implies health, cleanliness and general appearance of plumage, and head and limbs. Some judges cut for broken plumage in this section, whilst others cut in the sections where such occurs. Fowls suffering from chicken-pox, roup, canker, or any eruptive disease; black and white comb, or scrofula, scaly legs or bumble foot, soiled plumage, or anything that would mar condition in its most healthy and perfect appearance, is subject to a cut of one to three points; surface soiling incident to cooping, scratches on head or legs from the same cause, is treated with lenity and usually passes uncut.

HEAD.—This should be short and the crown broad; if narrow and wedge-shaped, or snaky-headed, like the Malay and Sumatra Game, it is cut one point; if the eyes be other color than bay, they are cut a point; if the beak be black throughout, or if cavernous and deficient in curve, each defect is cut; if a shade of yellow is discernable on the point and edges of lower mandible, a half-point would be just, but in the absence of any shade of yellow, it is cut a point; it is also cut a point for being flat. Plumage should be silvery white.

COMB.—This is described as *rose*, but there is much difference in rose combs, as can be seen by comparing the comb of the Wyandotte and that of the Red Cap. The Hamburg comb is a typical rose comb. The Wyandotte comb differs from the latter in being smaller, and in having less prominence of spike. If the comb be too large, standing high from the crown, flat or hollow in center, or if it drops down flat upon the neck, or turns up at the rear, it is cut one point, but when the comb is excessively large, flabby and shaky with the movement of the head, it is cut one to three points, as in degree. The comb should have an oval sweep on top from front to rear, in place of being flat; if the comb be "chubby" and deficient in spike, it is cut one to two points, as in degree; one so fleshy as to lop to one side, disqualifies.

WATTLES AND EAR-LOBES.—They should be bright red; if the wattles be wrinkled, frozen or mutilated, they are cut one-half to two points, as in degree, but it is only when both wattles are missing, that two points can justly be imposed on wattles. The ear-lobes are seldom cut, only when white or yellow become permanently fixed over a part of the surface, and then they are cut one to three points, as in degree; but if the whole of the ear-lobes are covered with white or yellow enamel, as in White-Faced Black Spanish, it disqual-

ifies the specimen. A blending of red and yellow, without appearing in patches, should not be cut over one point.

NECK.—Should be short and well arched. The novice may not understand what is meant by the word short, as applied to the neck of the Wyandotte. It is short and thick in comparison with other breeds of the American class, and the arch of the neck is more conspicuous on account of its shortness, and the hackle seems more abundant by the sweep of curve. When long or wanting in curve, it is cut one-half to one point; if the hackle be scant or short, it is cut one-half to one point; if the neck plumage be smutty black, and no distinct black stripe, it is cut two points; if the feathers have not a metallic lustre or if striped with brown, there is a cut of one to one and a half points, which can be added to the cut for smutty hackle. If the lacing be wanting one-half or three-fourths on feathers by reason of being black, it is cut one to two points; if the color be white, that is, the hackles without black stripes, it is cut two points; if in place of silvery white, the hackle be straw color or yellow, it is cut one to two points.

BACK.—The back is short for a breed of the size of Wyandottes, but compared with the length of the bird, it is medium. The back has a flat appearance across the shoulders, owing to the neck being short, and from the cape the downward slope is short, and the saddle rises with a concave sweep to the tail. If the back be convexed or roached, it is cut one-half to one and a half points, as in degree; if the back be narrow and oval, when the wings are set low, it shows a natural defect and injures symmetry, and such cases should be cut at least one point. The defects in this section, as a rule, are not many; long, round and narrow backs are quite common, but roached backs are rare. Pinched saddle, is cut one-half to one point; long backs, one half to one point; straight backs, one-half to one and a half points. The want of fullness in cushion is more apparent in the female, and is cut from one-half to one point. If the back be not silver-white or silver-gray, with no black stripe in center of feathers, it is cut one-half to one point; if the saddle feathers be tinged with straw color or bronze or yellow or gray, it is cut from one-half to two points; if the black be tinged with copper or gray, it is cut from one-half to two points; if penciled white centers appear on the backs of females, it is cut one-half point; if the white centers be discolored, it is cut one-half to two points; slaty lacing is cut one-half to two points.

BREAST.—If the breast be crooked, it is cut one to two points; if flat in front or wedge-shaped, or if it fails in being broad and round, it is cut for either defect from one-half to one and a half points; if the plumage be too light, having a very narrow black lacing, it is cut one point; if the lacing be wide, and brown in color in place of being black, it is cut one point; if the breast be too dark, it is cut one-half to one and a half points, as in degree; if slaty lacing, one-half to two points; irregularity of line between colors, is cut one-half to one and a half; if white edge to the black lacing appear, it is one-half to one point; if there be a failure of lacing on the females, it is cut from one-half to two points.

BODY.—This should be thick, deep in front of thighs and well rounded at the sides, with a corresponding fullness of fluff. If the sides be flat, it is cut one point; if lack of depth, or shrunken in fluff, or spare in sides, each defect is cut from one-half to one point, as in degree; if there be an excess of fluff and of dropping down behind, it is cut one-half to one point; if plumage be white, it is cut one-half to one and a half points; if black fluff, one-half to one point; white splashes in front of thighs, from one half to one and a half points. The male is black, or black slightly frosted with white, upon the under part of the body; and the fluff should be dark slate, or dark slate powdered with gray. The female is less faulty in these points; for white underpart of body, or smutty black fluff, or for white fluff, the penalty of each defect is from one-half to one point.

WINGS.—They are medium large and should be carried high enough to cause a flat cape across the back, and when this is defective it is cut one point; drooping wings, one point; when wings are imperfectly folded or one wing carried higher than the other, it is cut from one-half to two points; the latter cut is for wings which have the primaries folded outside the secondaries, usually designated "slipped wing." There is another defect in wings which the Standard has not noticed, and which judges have seldom if ever specially noted; it is the weakness of the pectoral muscles, which are continually contracting and relaxing the wings. If the weakness be from fighting or flying, and can be shown that it is temporary, a point or point and a half cut, to be considered the same as drooping wings; but if the weakness be from natural cause, the judge would be justified in disqualifying the specimen. The wing-bars are the most important sections of the wing, as the Standard calls for "a double-spangled bar." If the wings wholly fail in the bars, or, in other words, if the bar or bars are wanting, it is cut two

points; if the bar be solid black, with no spangles through the center, judges look on this with more leniency than if there was a loss of color to make two separate and distinct bars across the wing; as in the former case, the cut is usually half a point; or where it is a solid or Dark Brahma bar, it is the same; while in the latter case, the cut is one and a half points; if the outer web of secondaries be penciled with brown or black, to cloud the triangular tip, it is cut from one-half to two points, as in degree; primaries, three-quarters white, one point for each wing; solid white primary or secondary, one point for each wing; lesser coverts, wholly black, one to two points; black or bronze on rose of wing, from one-half to one and a half. In the females, the centers are sometimes penciled, and sometimes the feathers are spangled, in place of being laced; the penciled center is cut one-half to one and a half; spangled in place of laced, one-half to one and a half points.

TAIL.—If the tail be not well spread at the base, it is cut one point; if the sickles be straight, the cut is one point; if pinched or pointed, spike-like, one-half to one and a half; if the sickles be white, one-half to two points, as in degree; if the lesser sickles or tail coverts be colored with white, one to two points, as in degree; lesser coverts wholly white or gray, one point; white tips to main feathers, one point, and the same cut if white appear at the base of the main feathers. If the tail be carried squirrel-like, one to two points; when perpendicular, one point. In the female, if the tail be pinched, one point; grey on the upper surface of tail, one-half to one point.

LEGS AND FEET.—If the thighs be long and small, the cut is one point; for each crooked toe, one point. This may seem severe for a long leg, but the thighs and shanks of this breed are rather short; one-half point is the usual cut, except in excess of length and fineness of bone, the full point is imposed. If the male shows grey thighs, the cut is one point; if the shanks be faded, or the front clouded with a dusky color, and the rear of the shank yellow, the cut is from one to one and a half points; black scales and dark clouding of shanks, one-half to two points.

REMARKS.

We have quite fully given the defects and cuts which follow in judging Silver Wyandottes. Space will not permit us to judge the female singly, as we have in the most important sections embodied the female defects and cuts. The breast, however, needs further amplification, and, perhaps, it would be well to extend the

judging to hackle, wings and fluff. In the females the breast plumage is generally more defective than in males. Most of the cuts for defects are found in the throat and upper part of breast, owing to the failure of lacing, and these defects are cut from one-half to two points; the hackle is also cut for failure in color. If the stripe in the silvery-white feathers be wide at the point, giving a smutty or blotched appearance, it is cut from one to two points. If the cushion be flat, cut one-half point, and when it is so flat as to part at tail, it is cut from one to one and a half points. If the plumage of cushion be white, laced with black and the centers penciled, it is cut one-half point; if fluff be white, it is cut one to one and a half points; if the plumage on back has bricky, copper or bronzed color or hue, it is cut from one to two points, as in degree. If the primaries be white, it is cut a point for each wing; but this does not include the narrow outer edge, which should be white. If the secondaries be black on outside web, "failing to round the tip of the feather so as to give the scallop finish to the secondaries when folded," it is cut one-half to one point; if secondaries be white, it is cut two points; if the white center of coverts be penciled, the cut is one-half to one point, as in degree; if the coverts be wholly white, the cut is two points. If the tail be pointed, like the Cochin, it is cut one point; if the tail proper be tinged with white, one-half to two points, as in degree; if straw color or bronze appear on the coverts, it is cut one point; if the tail be carried upright, one point, and when squirrel fashion, it is one to one and a half points.

In nearly all other sections, especially of form, the female is judged and cut for defects like the male. As a crooked breast bone has much weight in breeding, it should be cut two points in the female, as well as the male. The female has less defects in form, and suffers most from penciling and indistinct lacing. Proper care and good food will help much to put fowls in good condition of flesh and plumage for the show room. If raised in a close pen, without regard to cleanliness and proper food to enrich the plumage, the pullets at the second moult will not shed clean, and many of the old feathers will become rusty and mar the remaining plumage, when it is closely examined in the judge's hands. Of course the comb, face, wattles and shanks should be cleansed with a mixture of alcohol and water, into which some pieces of castile soap may be put; then, with a nail brush, cleanse the dirt and scurf from head and scales of legs and anoint with a little alcohol and olive oil, to brighten and keep the parts from cracking, or becoming dry and

rough. Green food, a little meat, some flax seed and also sunflower seed, a few weeks before show time, will help to put the plumage in a more presentable condition.

PART SECOND.

GOLDEN WYANDOTTES.

ORIGIN AND HISTORY.

It was evident from the hearty reception of the Silver Wyandottes, under the name American Sebrights, that some of our enterprising fanciers would, ere long, begin to experiment with the view of producing a Golden variety; one that would share public favor and add another laurel to the brow of American skill. True, such an idea was not original, seeing that several varieties of our standard breeds, both laced and spangled, are plumed in a rich golden dress, which adds much beauty and value to their respective families.

There is no doubt that the idea of a Golden American Sebright had entered the minds of several fanciers at an early day, and that they proceeded, on different lines of crossing, to obtain the desired object. However, it was reserved for Mr. Joseph McKeen, a veteran fancier of Omro, Wis., to achieve marked success in originating and bringing forward a Golden variety, with all the leading characteristics of the Silver Wyandottes.

The well-earned reputation which followed the introduction of the Golden variety, after years of crossing other fowls to obtain a product worthy of crossing on the American Sebrights, which would insure desired points and fix them in the new variety, Mr. McKeen accepts with becoming modesty; and while others have striven to take shorter paths, by using Golden Hamburgs, Partridge Cochins, Rose-Comb Leghorns, and, in some strains, Black-Breasted Red Games, or Brown-Red Games, it is much to his credit that no jealousy exists on his part, or on the part of other workers in the same direction, so far as we know.

The Golden Wyandottes, like all new-made varieties, had not been brought to that degree of excellence which the fancier judge would call perfect, when the variety was admitted to the Standard. We examined some specimens on exhibition, and although they showed yellow on earlobes, faulty combs, dull yellow or bay ground

color, the material was there for a handsome and useful fowl. It could, in truth, be said that they had less glaring faults than some of the Silvers which were exhibited in 1883.

Perfection in standard points must be reached by slow and sure improvement. Rich and mellow though it be, the ground color can with advantage be made richer, and pure golden take the place of light yellow or buff; the lacing, too, can be much improved by a rich metallic black, in place of dark brown or sooty black. From time to time, as the variety grows older, and stronger competition is met in the show room, improvement of one point or another will show itself to the breeder and judge. Our tastes improve with our breeding, in the same manner that our skill and intellect improve with our experience and study. We are growing more æsthetic every day in our tastes, and demand better specimens of standard breeds than in times past, when our tastes were on a level with our environment.

No doubt Mr. McKeen, and other fanciers who conceived the idea of originating a Golden variety of Wyandottes, had this ultimate view in mind. To such men, there is a satisfaction and pleasure beyond the cash value, which such stock is sure to bring sooner or later. As fanciers, they knew well it would take time to bring perfection about, and it must come by slow degrees, and without disturbing those already fixed. The material is there; the form and structure already molded; the make up suggests comeliness and usefulness; a modification or, if you please, a "go between" the Asiatic and European types, which seems so well adapted to the size and practical value of the variety.

The history of the Golden Wyandottes is so well known to old fanciers that a repetition would not be attempted, were it not that we have been favored with a full and correct account of the material and the manner of crossing to obtain the breed designated "Winnebagoes," which was used as a top cross on the Whittaker strain of Silver Wyandottes, written by Mr. Joseph McKeen, specially for this book. As there are many points of interest in relation to the Winnebagoes that are new and never before published, we will give his statements in full:

"Some parties that have written on the Golden Wyandottes for publication in the poultry papers, the past few years, have been pretty near correct in their statements in regard to their origin, characteristics, etc., but are a little in error in supposing that the 'Winnebagoes,' the top cross on the American Sebright to produce

the Golden Wyandottes, had been bred for a long time in Wisconsin. How they formed this opinon I do not know, as there is nothing in my writing or circulars that would lead to such a conclusion.

"I am aware that many breeders of Golden Wyandottes are intensely anxious to know more about the Winnebagoes, the quality of their foundation blood, the material and characteristics which entered their composition. The following facts will throw some light on the subject: A few years prior to the time I began to breed the Golden Wyandottes, I was breeding Pea-Comb Partridge Cochins, and Single-Comb Brown Leghorns; I also procured some eggs of the Rose-Comb Brown Leghorn variety from T. J. McDaniel, South Hollis, Me. He did not claim that they were pure-blood Leghorns, but were crossed with a fowl, about the same color, that had a rose-comb and red earlobes, called 'York County' fowls.

"I had these Partridge Cochins, Brown Leghorns and Rose-Comb Leghorns together, and selected those that had the best rose combs, cleanest yellow legs and reddest earlobes. I selected a large cockerel that had a good rose comb, clean yellow legs, red earlobes, and plumage about the same as a Partridge Cochin male. I bred this cockerel on some mongrel Buff Cochin hens that came into existence in the following way: Some time about 1872 or '73, I was breeding some fine Buff Cochins and Golden Sebright Bantams. I let a family named O'Neil have some eggs of both these varieties; they raised the chickens and let them run together with some medium-sized common fowls on a farm. A few years after this, I found, with the O'Neil family, Buff Cochins with yellow legs, rose-combs, light leg feathering, and a slight show of lacing on some specimens. I bred the Partridge Cochin–Brown Leghorn cockerel, above mentioned, on some of these Buff hens, and the result was some cockerels of a very *deep buff*, all but the tail, and that was a *shiny green black*, with rose-comb and clean, yellow legs. Dorsey Smith, agent for the American Express Company, at Waukau, Wis., bought one of these cockerels of me about ten years ago, and has bred a number like him since. The pullets were of a kind of buff color with more or less penciling or lacing. My farm I called 'The Winnebago Poultry Farm,' and as these fowls were raised there, I called them 'Winnebagoes.' Now, from what I have written, we deduce these facts: that the Winnebagoes, the top cross to produce Golden Wyandottes, have Pea-Comb Partridge Cochin, Rose and Single-Comb Brown Leghorn, Buff Cochin, and I have reason to believe, a very little Golden Sebright Bantam blood in them; no

Game blood, as some suppose. I believe that the Golden Wyandottes in the east have Game blood in them."

Mr. McKeen began the task of originating Golden Wyandottes in 1880. His strain comes nearer to the Silver Wyandottes, in standard points, than the strains which have been produced by other parties. At an early day, G. L. Van Buskirk, Odell, Ill., experimented with the view of producing Golden Wyandottes; also W. E. Shed, Waltham, Mass., Jacob Ryder, Waynsboro, Pa., and Ira C. Keller, Tiffin, Ohio. Each of these fanciers, it is said, used Golden Hamburgs, Partridge Cochins and Silver Wyandottes in the formation of their respective products, but neither was so successful as Mr. McKeen.

The Golden Wyandotte was admitted to the American Standard, at Indianapolis, Ind., January, 1888. It was a surprise to many fanciers to see so young a variety admitted to honors without any opposition. They were very popular and promised to be a valuable acquisition to our stock. A number of new breeds had been proposed for admission, and it would be impolitic to refuse such a promising variety, while so many native and foreign varieties were being admitted.

GENERAL CHARACTERISTICS.

As a variety of the Wyandotte family, the Golden is a promising fowl, not alone for its transcendent beauty, but also for its general usefulness. It has all the merits of the Silvers, and an additional one of rich and unique plumage, as irridescent as that of the Black-Red Game. It was a favorite with many before it became a standard variety, but it was difficult to procure any birds or eggs until their breeders were satisfied that they could offer them in good faith to the public and feel confident of giving general satisfaction. To this reserved policy we are indebted for so few poor birds having been offered for sale; and, if the same safeguards had been thrown around the other recently-admitted varieties, we would have avoided many of the sales and the propagation of inferior and mongrel birds, and, also, many of the complaints which followed.

The merits claimed for the Golden variety do not trench on those of the Silver, nor lessen their inestimable qualities. On the contrary, the Golden adds much to the popularity of the whole family, as the White Wyandotte enhances the value of its particolored cousins. The Black, too, has its own special merits; each thus fulfilling its own mission and sphere of usefulness, and giving

pleasure and satisfaction to their admirers. This is the carrying out of the law of compensation, which gives to every variety some special merit.

The Golden Wyandotte has an attractive plumage, in addition to its intrinsic qualities. If one were to judge its future by its growing popularity, it is certain that it will take the lead in the American class, because it is robed in colors which convey to the eye and taste a richer plumage, one more admired for its rarity among domestic fowls, one which captivates the visitor to the exhibition room, and the amateur of taste who beholds them on the fanciers' well-kept lawn. With all these outside merits, they are no better layers than the Silver, White or Black; with all the beauty of plumage, they do not excel the other members in flavor, sweetness and tenderness of flesh. Some fanciers claim for them superior merits, and say they possess a stronger and hardier constitution, are surer stock getters, grow faster, and are less liable to the common ills of poultry. They base these claims on the material that was added to the Silver breed, in order to produce the golden plumage.

We will not discuss these claims, as we have no reason to doubt them, and prefer the testimony of breeders who have made careful comparisons, covering a number of years. There are many ardent admirers of the Golden Wyandottes, besides their breeders, who suggest a reduction of weight; that it is a drag-chain, which has kept them back from the beginning; that their beauty would show to better advantage if united with a more tidy and graceful carriage; that the grossness of size and shape is too suggestive of Asiatic; that a reduction of a pound, at least, would increase their fertility, and render their flesh more tender and succulent; that the day of huge carcasses is over, and sensible breeders have come to the conclusion that grossness of size is incompatible with fertility, flavor and delicacy of flesh, and with our improved æsthetic tastes.

With our experience, covering nearly half a century, in the breeding and study of domestic fowls; our travels abroad, pursuing the same study; gleaning information on the most noted breeds of Europe, North Africa, Western and Southern Asia, and the Indian Archipelago, while engaged in the interests of ornithology with our distinguished cousin, well known as an eminent naturalist; we are free to confess, it is our humble opinion, that when breeds or varieties are bred with the ultimate view of increasing their size beyond the growth of the average-sized birds, as they develop in the broods, with their abnormal growth, there is a corresponding

decrease in the fertility of the hens, and, also, in the prepotent functions of the male; or, in other words, grossness of size, in male or female, is tantamount to a decrease in production, and in fertilization of that production.

This is not our first time in giving such an opinion to the fraternity, for, every spring, when suggesting something on mating or egg production, we deplore and condemn grossness, as being antagonistic to precociousness and fertility, and our views have passed unchallenged. The same law holds good among the larger species of animals and plants; it is nature's law of distribution, organization, compensation and deduction. Our Asiatic and American classes would be more valuable as egg-producers and stock-getters, if a pound or more would be taken off their standard weights. We suggest this advisedly and disinterestedly, as we are not at present breeding any of the varieties of either class.

It is well known on this side of the Atlantic, to what extremes English fanciers have indulged, in the past decade. The excessive development to which they have brought Asiatics, Plymouth Rocks and Wyandottes, has been marked by a large decrease in the number and fertility of eggs. The same complaint is heard throughout the land regarding the failure of Cochin eggs to hatch well. A similar complaint arose in this country a decade ago, and while there was a premium on abnormal size and weight. Mr. Isaac K. Felch, whose experience in poultry is second to none on this continent, favors natural weight in the large varieties, as he has witnessed hundreds of cases, showing vast improvement in production and fertilization, since extra points for weight have been abrogated in the Standard.

Since the English fancier has taken to the breeding of Plymouth Rocks and Wyandottes, size is a leading fad, and is detrimental to plumage and other points. The coarseness of their Plymouth Rocks, almost verging on the Asiatic, shows the English predilection for excessive development. In the same manner, the fanciers of Wyandottes are breeding them to individual types, and to suit individual judges. A small English work on Wyandottes before us says that "The types of Silver Wyandottes, as seen in England, are as numerous as the colors of the rainbow." Again, it says: "The failings or faults of Silver Wyandottes, as found in England, are really very numerous—so numerous, in fact, that one seldom sees a good bird. The reason is, that English judges and breeders have, until recently, been going for an entirely wrong type throughout."

Speaking of the Golden variety, it says: "As generally shown, Goldens will compare favorably with Silvers in point of merit, and individual males and females have been seen far surpassing in quality any of the Silvers yet exhibited. This I put down to the fact of the 'Goldens' not having been in England long enough to be spoilt; but I am afraid to say how long it will be before they are, as, even this year, the pullets are a very long way behind those exhibited by Mr. Geffcken at the Crystal Palace, and elsewhere, in 1888."

The Golden Wyandotte has been much improved the past few years, in this country; the jaundiced yellow ground work has given place to rich yellow or golden bay. The male has the same short, flat and broad crown as the Silver, White and Black Wyandottes, but the color of plumage is rich yellow or golden bay; eyes and beak the same color as those of the Silver; shape, size and points of comb the same; ear-lobes and wattles the same in size, form and color; neck, hackles, back, breast, body and fluff the same in form and development, only differing in plumage, which is golden and deep reddish bay, the fluff slightly tinged with yellow; wings, legs and tail the same as corresponding parts in the Silver, differing only in the outer web of the primaries being edged with buff or golden bay, outer half of the lower web of secondaries, golden bay; lower web of wing coverts, deep buff or golden bay; wing bows, deep reddish bay; web of shoulder coverts, deep, rich red; thighs, tinged with yellow; the edging of lesser tail coverts, reddish bay being permissable. The Golden is exactly the same as the Silver in standard points, except color; yellow, golden bay, and deep reddish bay, take the place of white and silvery white; under-color, dark slate, tinged with yellow.

As there is a promising and wide field before the Golden Wyandottes, owing to their rich and attractive plumage, we will offer a few suggestions on *description* and *judging*, which will also aid the novice in his efforts to become more familiar with the form and color points of the variety. And, as the plumage of the Golden is the counterpart of that of the Silver, with the exception of the ground color, as above stated, which is golden bay instead of silvery white, a minute description of the Golden is unnecessary. However, we will mention the defects in each section, and the cuts which should be inflicted in each case, thus making it as valuable and instructive to the novice as if we were to devote a special chapter on judging.

DESCRIPTION, DEFECTS AND CUTS.

It is to be understood that the type of the Golden Wyandottes must conform to that of the Silver, as explained in the preceding chapter, and each section, in form, must also comply with the standard for Silvers.

HEAD.—The shape of head with its broad crown is the same as that of the Silvers, and all defects in shape are cut the same point or points as given in judging Silver Wyandottes. *Defects*—Narrow on crown, pointed or snaky, long and wedge shaped, like that of Games; cut, one point.

Eyes, bay in color. *Defects*—Grey, yellow or red, or other color than bay; cut, one point.

Beak, nicely curved, dark horn color, shading to yellow at the point. *Defects*—Flat beak, cavernous, as in crested fowls, wholly black; cut, one point for each defect.

Comb, rose, low, not quite as wide at base as crown; top, oval in shape, surface covered with corrugations, and terminating in a small spike at the rear; the whole comb curving slightly, so as to take the form of the skull; color, bright red. *Defects*—Too large, stubby, surface unevenly corrugated, hollows in surface, spike of bad shape, spike turning upward, spike pressing on neck, absence of spike; cut, from one-half to three points, as in degree.

Wattles, medium length, nicely rounded, and bright red in color. *Defects*—Wrinkled, torn, disfigured by frost, both wattles missing; cut, one-half to two points.

Ear-lobes, bright red, and well developed. *Defects*—White or yellow enamel on surface, so as to appear permanent; wholly covered with enamel disqualifies; cut, one to three points, as in degree.

Color of plumage, rich yellow or golden bay. *Defects*—Pale yellow; cut, one-half to one point.

NECK.—The same length, form and curve as that of Silvers. *Defects*—The same as stated before; cuts for the same defects and in the same proportion, according to the degree. This holds good throughout all the sections.

Plumage, golden bay, each feather having a clear black stripe through the center thereof, and tapering to a point at the extremity. *Defects*—Other color than golden bay, lacing obliterated two-fifths of length, smutty hackle, loss of black stripe, stripe without lustre, scant hackle; cut, in degree, as in Silvers.

BACK.—The same in length, width and form as that of the

Silvers. *Defects*—The same as stated before; cuts for defects and in the same proportion, according to degree, as for Silvers.

Plumage, deep reddish bay, the saddle having a black stripe through the center of each feather, as in hackle. *Defects*—Other color than reddish bay, stripe without lustre, reddish bay lacing tinged with white, penciling on lacing, smutty back, saddle void of black stripe, white in under-color, or other defects; cut, in the same manner as in Silvers.

BREAST.—The same as that of the Silvers. Plumage, under-color, slate, slightly tinged with yellow; the web black, with medium-sized golden bay centers, which taper to a point near the end. *Defects*—Outer edging tinged with golden, black penciling in centers, centers light in color, too dark at throat, centers indistinct, other color of centers than golden bay, other color than slate tinged with yellow in under-color; cut, in the same manner as in Silvers.

BODY AND FLUFF.—The same as in Silvers, Plumage, under-color, the same as breast; web of feather, black, or black tinged with reddish bay; fluff, dark slate, and tinged with yellow. *Defects*—Are less in this section than breast or back; sooty back, absence of yellow on fluff, lightness of color, white in under-color, and such defects as would detract from standard requirements; cut, in the same manner as in Silvers.

WINGS.—The same in size, shape and manner of being carried, as that of the Silvers. Plumage, deep buff or golden bay on the lower or outer edge of the primaries, where it is white in the Silvers; the other part of the primaries is black; secondaries are also black, with outer half of the lower web golden bay, where it is white in Silvers; wing coverts, the upper web black, the lower web golden bay, with a narrow black stripe on the edge, which widens as it comes near the tips, thus forming a double spangled bar across the wing; wing-bows are a deep reddish bay; shoulder coverts—web of feather deep rich red, and under-color slate. So it is seen that reddish bay takes the place of silvery white on wing bows, and web red in place of white in Silvers. *Defects*—bows too dark, want of bars, penciled on secondaries, smutty bars, black on outer edge of primaries, white in under-color, light buff on primaries, indistinct bars or black running into bay, and such defects as mentioned before by substituting golden bay for silvery white; cut, in the same manner as in Silvers.

TAIL.—The same in form and furnishing as that of the Silvers, and the same throughout except the edging of reddish bay on the

coverts following the color of the saddle. *Defects*—The same, and cut the same for too much red or white appearing in tail, or other faults.

LEGS AND TOES.—The same as in Silvers. *Defects* and *cuts* the same.

THE FEMALE.—As the female Golden Wyandotte is judged on the same principle of scoring as the female of Silvers, and, as there will be found in both male and female a little more irregularity in the divisions of the colors, they will, for some time to come, be judged a little more severely than their cousins. The female Silver Wyandotte is more favored, so to say, by the character of the defects, as they are usually of the nature of reddish and bronze shadings, pencilings, under-color light, white in tail, too much stripe on neck, back mossy, lacing on breast not going all around, and a white edging to black lacing with under-color light; the female of the Golden variety will show defects which will be much harder to breed out, as the golden color may be marred by pencilings, even double pencilings, as in the Cornish Indian Game, in some specimens already reported in England; light shadings, or white in under-color and tail, and the black stripes and lacings, are subject to the same slaty or rusty shadings as the Silvers, and, of course, such defects should have similar cuts.

We have given as much information on judging as our limited space will allow. In fact, we have transcended the limit set apart for the Silvers and Goldens, on account of the colors and their distribution over the whole plumage. Solid colored breeds do not need so much space for *description*, *mating* and *judging*, as there is but one color to describe, and the defects may be readily judged, as they usually accompany one color; but, in the Silver and Golden Wyandottes, new defects may come up any time, as the colors are not thoroughly and permanently established, and the same class of defects is not always present. "This complication of color, or, rather, combining a penciled and spangled race, out of which to establish a lace plumage, has been no easy matter." In all the exhibitions, the examination of the scores of males show the largest cut to be in neck, breast, and body or wings, the latter ruling the highest, while in females they cut heavily in breast and body, neck and back. A man who can correctly judge Silver and Golden Wyandottes, has laid a good and promising foundation for becoming a first-class "all round" poultry judge.

PART THIRD.

Black Wyandottes.

ORIGIN AND HISTORY.

The Black Wyandotte is the last addition to the Wyandotte family, and has proved a worthy member in comeliness and utility. No family in the Standard can show such evenness in size, type and general characteristics as the Wyandotte. There is not a good or poor quality in one that is not found in the other, and, what is most singular, two varieties of the family are "sports," and two have been made by composite crosses. The unity of standard points is not accidental, but rather due to intelligent and harmonious views on the part of their breeders, to make all uniform in every standard point, save color.

The Black Wyandotte is bred in a quiet way, and handled by some experienced breeders. It is not likely to create a stir among fanciers when it becomes a Standard variety, and takes its place with its older cousins; there are so many handsome varieties belonging to the family, which will attract, please and satisfy many, who will not transfer their liking to a black fowl. It will, however, have many warm friends, and those who are at all partial to black, will be sure to breed the Black variety, and many will, in years to come, make a specialty of Wyandottes, and breed all varieties.

Black Wyandottes are bred in a limited way, owing to a divison among breeders as to the color of their legs. Some are striving to establish a yellow leg, so as to be uniform in this, as well as in other standard points, with other members of the family; and, besides, the addition of yellow legs will make them more valuable for market or fancy sale, more attractive on the lawn and in the show-room, and set off the rich black plumage and red of head to better advantage. The majority of Black Wyandotte breeders is in favor of breeding them with yellow legs, although it is well known to be a

hard task to fix them on a black fowl, without sacrificing color; white appearing at times in under-color, wings and tail.

Every naturalist knows that black fowls do not, as a rule, have yellow legs; and every naturalist knows that by far the greater number of standard varieties do not follow nature in their standard points; all are, more or less, artificially bred from comb to tail; a constant watchfulness, culling and selection being kept up, year after year, to prevent natural colors, natural type and facial appendages appearing in the broods. This is conceded, then, in the case of Black Wyandottes: a dusky leg would be more natural to the variety, fewer disappointments in breeding would occur; novices could take up their breeding with reasonable expectations of success, and feel assured of rarely seeing light under-color or white in the plumage.

On the other hand, it is claimed that breeding Black Wyandottes with yellow legs saves the variety from deterioration, as those with black legs may or may not be pure, and no variety can be so readily "made up to order" as Black Wyandottes with dark legs. A Black Wyandotte mated with very dark Plymouth Rock hens, or Black Javas, will, in a few generations, pass muster for Black Wyandottes, and there are scores of breeders and jobbers ever ready to turn a quick sale to account, and not over scrupulous as to the manner of breeding, to obtain the black plumage and black legs.

Another point urged in favor of yellow legs is, that as all the other varieties of Wyandottes have bright bay eyes and yellow legs, it would be odd to have one of the family differing from the others in color of legs. Some white varieties have pale or flesh-colored legs, and some have blue; and some black varieties have yellow legs. Much depends on the material used in making a black variety, or on the stock from which it is a "sport;" that is one great cause which works against a successful fixity of yellow legs in black fowls. No doubt, time and patience will accomplish the breeding of Black Wyandottes with yellow legs, and a yellow leg is far preferable to black, if too many otherwise splendid specimens be not sacrificed annually, for so small a matter as the color of legs.

Much could be said for and against the question of yellow legs in this variety. Personally, we much prefer the yellow legs, for the reason that it would enhance their value, and lead many amateurs to take up their breeding, who would not be attracted to them if bred with black or dusky legs. Yellow legs would not make them better layers, provided pure Wyandottes were bred with

dark legs, agreeably with standard requirements; but, if yellow legs be the exception, and not the rule, after eight or ten years breeding in a direct line, then, we say, dark legs should be the standard color—the natural color, and the easier color to produce. It is by no means impossible to breed and maintain yellow legs on Black Wyandottes, as many Black Leghorns in Italy have yellow legs, and that, too, without special efforts in breeding; but we have noticed, at the same time, that white in wings, tail and under-color almost invariably accompanied yellow legs. Some of the native Black Games of India, notably the Pulligars have yellow legs, and forty years ago many of the Black Pit Games in Great Britain had yellow legs. Yellow is a tropical color, and yellow or tawny legs prevail in Southern Asia among domestic fowls. Fanciers have made greater and more difficult changes than yellow legs and have been successful.

It would help the culture of Black Wyandottes if breeders were in accord on the question of yellow legs and disqualifications, as it would save many otherwise good birds being put to the block for light under-color, discolored hackles, and white in wings or tail, as in the breeding of Black Cochins some years ago. This discord on the question of leg color, will work injury to the variety and discourage many from taking them up, as there is no assurance, at present, of a final adoption of one in preference to the other, though it is confidently surmised that the standard adopted will be for dark legs; that is, of the color of Black Cochins—unless outside pressure strongly prevail on the advisability of its adopting yellow legs, as being more in accord with other members of the family, and being more popular.

True, the advocates for dark legs on Black Wyandottes, have better grounds for their preference and can appeal to nature and precedent, and how the change from yellow to dark has benefited other black varieties and removed the recurring obstacles which followed their breeding. A compromise can be readily effected, if they cannot agree on yellow legs—to accept willow, or yellowish black, the standard for Black Leghorns. The few English fanciers who have imported Black Wyandottes are in favor of yellow legs. It is not a strong point to adduce some black varieties, as an illustration to show that Black Wyandottes ought to have dark legs, as the material of which they are partly composed reverts to dark or dusky legs in the ancestors, perhaps for hundreds of years. There are exceptions to this rule, and Black Wyandottes may succeed, though

other black varieties have failed of giving satisfaction, while being bred with yellow legs.

GENERAL CHARACTERISTICS.

The Black Wyandotte has not been thoroughly tested in the line of breeding, though it is safe to say that they have come up to all reasonable expectations so far. The number of fairly good specimens, and the average percentage of faulty birds in color, count well in their favor; while faults in shape, comb, ear-lobes, breast and body do not fall behind the Goldens. This favorable showing on the start is mainly due to the skill and experience of their original breeders, as few novices have taken a fancy to them, owing first to their color, and being a non-standard variety, and in the next place, there are three other varieties of the same class enjoying well-merited popularity on their handsome and unique plumage; consequently the breeding of Blacks is mainly confined to old hands.

We presume to say, that Black Wyandottes have appeared in many of the poultry yards the past decade, without causing any attention. That they are new to the fancy is true only in the sense of their not being brought to public notice before. Breeds made up of composite crosses, each element of color struggling in the combination for influence or mastery at each transmission of the collective elements, it is no wonder that some individual element of color takes precedence, or gains force to subdue, check or hold in abeyance other parts of the admixture, to triumph for awhile or for an indefinite period, if assisted by the breeder. Black is a very strong color, and will assert itself in any combination where it has equal quantity, whether it be in fowls or animals.

We have no doubt about the Black Wyandottes holding their own in the show room, on the nest, or in the shambles. They are Wyandottes, and color will have little influence on their usefulness. Those who know Wyandottes by experience or reputation, will not hesitate to breed the Blacks, if at all friendly to dark breeds. Time will bring them to the front rank with their cousins; and every one interested in poultry will know that this family combination takes the lead for general usefulness and, we might say, beauty, too. Fanciers will hardly stop and be content when the Blacks take their place in the Standard roll; already there is a veteran at work perfecting a Golden Spangled variety of Wyandottes which, if we may judge by the specimen feathers sent us, will rival the Golden Spangled Ham-

burg or the Golden Spangled Polish in purity, richness and sheen of plumage.

Yes, the originator of the Golden Wyandottes is trying his hand on a Spangled variety. Fanciers of a practical turn of mind will follow out the old saying, "We cannot have too much of a good thing." The American Poultry Association will hardly "kick" against a few more varieties of this class, seeing that the Polish has eight and the Hamburg six varieties. Surely a useful family like the Wyandottes need a good share of beauty, too, in order to please the fastidious amateurs, as well as those who desire usefulness and beauty combined. The Black with a rich, metallic sheen, like that on a well-bred Langshan or Black Hamburg, will not be the least among the great and popular varieties, as close competition will stimulate their breeders to make every effort to improve them in usefulness and beautify them for ornamentation.

There is no doubt that the Blacks will be on the roll of honor when the Standard will be open for reception of new breeds, because every member of the American Poultry Association knows that a Black variety in the Wyandotte family was possible any day since the advent of the Silvers. We are sure, too, that no pains will be spared to make them worthy of Standard recognition, as there will be no need of spurious manufacture, as was the case in many instances when the Whites were booming. It is in the breeders' own hands to build up or tear down this promising variety, and it is near time that they should come to an amicable and harmonious agreement on the color of legs and some other minor points, so they can make a standard, and submit it for approval or correction, and for the best interests of the variety.

The beginner will have comparatively easy lessons in breeding the Blacks or Whites. People of æsthetic taste often wonder at the different tastes of breeders; one choosing this, and one choosing that, breed or variety. It has ever been the same way, and, in all probability, it will ever continue as in the past, as it is a part of our nature, and necessary to our existence, comfort and happiness. Some will always be found ready to pick up the first new breed that is announced, while others cannot be weaned from the "old reliables," and more, will look with distrust on every new comer, and venture to prophesy a short life for it; and there are some who are jealous of every acquisition to our native stock, and growl about admitting any more to our Standard list, for fear they will draw patronage from their own favorite breeds.

DESCRIPTION.

Some enterprising breeders have submitted a standard for Black Wyandottes, to those interested, for approval and correction. These standards are good enough substantially, so far as they go, but, as they do not voice the sentiments of all interested in the variety, they are, in a manner, useless to breeders, owing to the uncertainty of leg color, and disqualifying clauses on under-color and white in plumage. We are met by the same obstacles in giving a detailed description of the variety, and, of course, no standard would be reliable but that made under authority of the American Poultry Association. It is certain, however, that the description will be uniform with the other three varieties, and the only difference will be that relating to color of plumage, color of legs, and, also, the clause in disqualification, as mentioned before.

The precedent that, practically, every black variety in the Standard has dark shanks, and that two, at least, of said varieties have had yellow legs, and, in the course of their breeding, it was found fruitful of many serious obstacles and faults, will be taken into consideration, and, although every lover of Wyandottes would rather see the Blacks have yellow legs than dark ones, the best interests of the variety, so far as breeding with better results, will have much weight against yellow legs. The standard for Black Leghorn legs is the one most likely to be adopted.

THE MALE.

In a general way, we will say to those who have no standard, and meditate breeding Black Wyandottes, that the plumage should be a rich glossy black throughout, and preferable if it has that metallic lustre and beetle sheen, so much admired in well-bred Langshans. The head, short, crown broad and somewhat flat; beak, dark horn color, shading to yellow at the point; eyes, bright bay, large and clear; face, red; ear-lobes, bright red, and well developed; comb, rose, low, top oval, and covered with points or corrugations, terminating in a small spike which curves to the shape of skull; wattles, bright red, medium length, and pendant; neck, short, arched, and hackle abundant; back, short, flat and broad at shoulders; saddle, broad, full, and rising with a concave sweep to tail; breast, broad, full and round; body, short, deep and round at the sides; fluff, full and abundant; wings, medium size, and neatly folded; tail, well developed, and well spread at base; sickles,

medium length and gracefully curved; legs, short and stout at thighs, and well covered with soft feathers; shanks, short, stout and free from feathers, and in color yellow or yellowish black; toes, straight, well spread, and in color the same as shanks.

THE FEMALE.

The plumage should be a rich, deep black throughout; head, short, crown broad and somewhat flat; beak, dark horn color, shading to yellow at the point; eyes, bright bay, large and clear; face, red; ear-lobes, bright red, and well developed; comb, rose, and similar in form and curve to that of the male, but smaller; wattles, bright red, medium length and well rounded; neck, short, arched, and hackle abundant; back, short, flat and broad across shoulders, and slightly cushioned; breast, broad, full and round; body, short, deep, and round at the sides; fluff, full, soft and abundant; wings, medium size, and neatly folded; tail, well developed, and well spread at base; legs and toes, the same as in male.

REMARKS.

One cannot give a complete list of the disqualifying clauses, on account of not knowing what the standard will enforce by its judgment on the color of legs. However, we can approximately judge that it will not be far from the following: *Disqualifications.*—Feathers on shanks or toes; permanent white or yellow covering more than one-third of the surface of ear-lobes; combs other than rose, or falling decidedly over on one side, or so large as to obstruct sight; decidedly wry tails; crooked backs or other abnormal deformity; shanks other than yellow, yellowish black, or black shading to willow; feathers tipped or spotted one-half with false color on any part of plumage; presence of any false color to be cut severely.

The standard weights are the same as for other Wyandotte varieties. The scale of points for judging this variety should be the same as for Whites. A few more years of intelligent breeding will remove some of the defects now apparent. The chief trouble is, that white appears in primaries and secondaries in the females, and white feathers and silver hackles and saddles, and white in wing-bar, in the males. These, in time, will be lessened by judicious breeding and culling, as will also white in under-color.

It is not to be expected that the Blacks will produce a large percentage of salable birds at present, as the pullets usually come

solid black with black beaks, dark combs and faces, and, also, black shanks and toes, with the bottom of the feet yellow. The reversion to the Silver variety is more apparent in the cockerels, and they are less certain in plumage; white shows very frequently in places above named, and also in tail. Improvement, at best, is of slow growth, but there is a determination among Black Wyandotte breeders to conquer existing faults, and make their favorite variety second to none in richness of plumage and intrinsic qualities.

Much of the future success of this variety, depends upon harmony and united action of their breeders, in bringing them before the people in a presentable condition, which can be depended on to be maintained in their breeding. The standard should not be too arbitrary on the color of legs, and judges should not provoke or increase obstacles to their cultivation, by dealing too severely with them in the show-room. But, whilst admitting a certain policy of leniency towards the Blacks, for the present, their breeders must not cease in their endeavors to obtain a pure, glossy black plumage and pure yellow leg, which is so strikingly handsome.

MATING AND JUDGING.

Little need be said on mating solid black or white fowls, if their physical qualities are faultless, or as near perfection, in vigor and health, as can readily be obtained. This secured, color is the next object of importance, and, in Black Wyandottes, metallic black should be the ideal for both sexes, and not sooty or dead black, lacking in intensity of color, brightness, hardness and smoothness of finish and lustre. In black varieties there is little to do beyond these two distinctions in color, and each mating must tend to establish this richness of plumage.

It is best, at all times, to mate metallic black males and females together, but, if one is limited in breeding stock, he must make the best use he can of others. If the male's plumage is a rich, lustrous black, and that of the female dead or sooty black, most of the pullets will come in fair plumage, much richer than that of the dam, but the cockerels will be inferior to the sire in hardness, smoothness and polish. The union of a metallic black male and a dead black female will, in time, restore the color, and improve and beautify it, if a skillful selection of the progeny be made, and put with those of the black metallic mating.

There may be a disposition to mate males with white in wing or tail—otherwise good—to prime colored females, in the hopes of

securing first-class birds, and running chances of getting some without the objectionable white. This is a very injudicious policy, as the white is bred into the stock, and will "crop out" now and then, if not in every brood. Present expediency should never be attempted, when everything shows that it is going to work injury for years in the breeding fowls, not only in the yards of the one who has caused this injury, but, also, in the breeding fowls of those who unfortunately purchased some of his stock.

"Make haste slowly" is a good maxim to follow in cultivating new varieties. The "almighty dollar" has such weight and influence over the flexible conscience of some breeders, that they will not take time, nor put themselves to any unnecessary expense or trouble, in obtaining a male or female which would be free from such objectionable points, and, if granted that such birds are "few and far between," at least, they have it in their power to wait until the variety has been bred long enough to remove such defects as would disqualify them in the show-room, and not breed a disqualified male in the hopes of procuring a Standard offspring.

JUDGING.—On this point the defects are, sooty black or dead black color of plumage; white in hackles, wings and tail; white in under-color; dusky shanks, feet and toes. Sometimes gray appears in hackles, back and breast, and those males which show bright yellow legs (supposing yellow is the standard color) are almost invariably troubled with white in tail, and sometimes in hackle, too. Of course, such defects often appear in old varieties, but these are exceptions, as a rule, and it is to be expected, in the course of time, that Black Wyandottes will breed as true to color as other black varieties. The scale of points for judging this variety should be the same as for whites, as already mentioned, and the degree of defects from a rich glossy black is to be cut accordingly. In all other sections, aside from color, the defects in each will be the same as in other varieties, consequently, the cut for each defect will be the same as already scored in the laced birds; all must conform to one standard, and all defects must be judged alike.

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WHITE WYANDOTTES.

PART FOURTH.

White Wyandottes.

ORIGIN AND HISTORY.

There seems to be a well-founded opinion among poultrymen, that the White Wyandotte is taking the lead of its cousins. With the White Plymouth Rock starting in the race for popular favor, the friends of each variety having boomed and lauded them to the skies, the demand even exceeded the number of breeding fowls, and created a desire in some to take advantage of the demand, and cross Rose-Comb White Leghorns, White Dorkings, etc., on the Silvers, and, in some cases, on White Plymouth Rocks. This unscrupulous and dishonorable means of putting in the market mongrels and spurious White Wyandottes, had a very bad effect, and would have blasted the hopes of many, had not some honest and enthusiastic breeders come to the rescue, and urged the formation of a White Wyandotte club, and, at the same time, condemned those who were taking dishonest measures in the manipulation of this meritorious variety, which was able to stand on its own merits, when purely bred.

The White Wyandotte is rapidly approaching reliability in the hands of experienced breeders; as near the ideal type and general comeliness of a Wyandotte, as we could reasonably expect of a new variety, while, at the same time, there are a number of breeders who have poor specimens coming into the world with each brood—living witnesses of their impurity. We think this is mainly due to undue haste, in buying up from different yards new strains, in order to have several breeding-pens at once to fill the demands and secure the prices —five to eight dollars a setting—and the anxiety of many to produce strains of their own, with, perhaps, only one bird of the variety to start with, disseminating through the country a miserable lot of

scrubs taking the name of White Wyandottes, the name being a passport to their sale and value.

Those who watch the system of breeding thoroughbred fowls and animals, are not surprised at these periodic or spasmodic booms. Our ingenuity and enterprise must not rust for want of friction, nor will we accept the maxim that "true genius is ever modest." We rush at things without weighing the ultimate results; failure is unknown in our vocabulary, for, when we make a false step, we do not retire to examine the ground, and calculate on the obstacles before us, but we start on a new path, and manage to reach the objective point by the shortest road. Away back in the "fifties," we worked up a hen fever craze, which appears to have taken deep root in our soil, as it comes, like other contagious fevers, when our blood is morbid and sluggish and needs stirring up. Our English brethren do not have this fever with such virulence, but they have learned many of the Yankee tricks at manipulation; not in making new varieties, so much, but in working over old stock for the American market.

We may take to ourselves much praise for producing the finest class of fowls known to the American or European poultry fancier. Indeed, it is hard to discriminate between the "Rocks" and "Dottes," as far as beauty and utility go. It is, perhaps, known to the amateur, that the White Wyandotte is one of the best, if not the best, of the American class, for every purpose. We know there are many enthusiastic admirers of this variety, who make very extravagant, and, indeed, ludicrous statements of their superiority in laying, but it is pardonable on the part of those who sometimes contribute to their favorite poultry papers, an article on the variety or varieties they are breeding; so it is not the White Wyandotte, altogether, that receives all the fulsome adulation of an enthused amateur; every Standard breed is recorded, in cold type, the "best breed in the country."

It is a mooted question who originated the White Wyandottes. The friends of Mr. Geo. H. Towle claim that he was breeding and improving the White Wyandotte in 1872, while the friends of Mr. B. M. Briggs, of Wyandale, N. Y., insist on his right of priority. A few others, too, modestly hint that they had "white sports" as early as those who are claiming the honor, but, on investigation, the credit is due to one or the other of these two gentlemen; the latter, however, having the first strain of pure-bred birds in a presentable condition, and this honor was conceded by the White Wyandotte

Club, when Mr. Briggs was elected as president and chairman of the committee on a standard for the variety.

The White Wyandotte followed the Silver breed, and originated from "sports;" therefore, are thoroughbreds, and not a cross-bred variety. They have all the distinctive characteristics of the original breed, and their own distinguishing color. It is certain that the pure Whites have shown a more pleasing type than either the Silvers or Goldens; that is, the young of the Whites usually develop to what judges deem an ideal for Wyandottes. "Silver King," being one of the best specimens, in type, of his race, has been accepted as an ideal by the club, and this will be a stimulant to White Wyandotte breeders to attain this type in their flocks; the living specimen being worth more to them than all the cuts and profiles of the variety put together.

This type for the White Wyandottes is not only universally accepted, but is also universally commended for other Wyandotte varieties. A well-known writer voiced the sentiments of Wyandotte breeders, shortly after the Whites were admitted to the Standard: "Type is to be one and the same for all, for we have all got to breed to that outline that the committee of breeders or the Wyandotte Club shall adopt. This is going to obviate all strain characteristics. * * * The cockerel exhibited by Mr. Croffut, of Binghamton, N. Y., was, by far, the best specimen that has yet been exhibited, and, surely, no better type could be secured to outline the entire race of Wyandottes. * * * They are now in the Standard, and, if a decided stand is taken to adopt a pure Wyandotte type, free from all Leghorn taint, and the breeders of them will guard jealously this type, they will, in a few years, be proud of this new acquisition. All new breeds suffer from a boom, for unprincipled men will sell eggs during such a boom that are not reliable, and the race has to live this evil down."

A volume could be readily filled with testimonials of Wyandotte breeders in commendation of this race, both for laying and market purposes; while all agree that the laced and self-colored varieties are beautiful, comely and unique. It might be said of the Black and White varieties that their popularity is due to the Silver Laced breed, and that if there were no laced breed before them, they would be considered mediocre. There is no disputing the fact that these varieties have been boomed on the merits of the Laced, like the White Plymouth Rocks on the popularity of the Barred variety; but while conceding this, is it not equally a fact that these self-colored

varieties have proved themselves worthy members of the Wyandotte family in every point save color?

The spurious fowls representing White Wyandottes, and falling short of those qualities so highly commended in the laced birds, ought not militate against the pure bred fowl, any more than bad members of a congregation ought militate against the purity of the religion which they claim to represent. Self-interest is a strong passion in the average man, and when every inducement and opportunity present themselves whereby he can turn a ready dollar to his own advantage by a little shrewdness, which suggests a choice between honest and dishonest dealing, the latter is often taken to mean cuteness of ability, or taking advantage of another in a trade or sale.

The Rev. F. H. Parsons writes of the White Wyandottes, in 1887: "I am forced to the conclusion, from what I have bred, seen and learned by correspondence with breeders of White Wyandottes, that from stock strictly first class, birds can be raised that will be as uniform and give as many superior birds as the standard variety, and for the careless breeder better results will be found; but if you have fine standard birds, be slow to give them up, expecting to get something very much superior. For general purposes there is little difference, the birds being almost identical in characteristics, but White are one-half pound short in weight, and here is found a tendency in unscrupulous breeders to use a White Wyandotte cockerel with Rose-Comb White Leghorn hens of large size, and sell the cross for White Wyandottes. They may suffer reproach in this way, for they are hard to detect, the ear-lobe being the surest test. They are deservedly popular and will in a few years be one of the leading farm fowls, as when dressed no colored pin feathers are seen; their bodies are good size and plump, with yellow skin and legs; maturing quickly and easy to raise, with a white plumage, and are but little trouble to mate, and breed well. 'The more I see of them the more I admire them,' is the universal testimony."

GENERAL CHARACTERISTICS.

As egg producers and table fowl, the Whites are equal to the Laced. They have the same plump bodies, constitutional vigor, physical beauty, commanding carriage, standard points, and the only difference is the color. They can be used at an early age for broilers and roasters. The adult males will weigh from seven to eight pounds, and the females from six to seven pounds. These

weights, in a comparatively short and clean-limbed fowl, indicate a solid, compact flesh former, with little offal.

Although utility is the leading merit and strongest recommendation to all interested in poultry keeping, the Whites are also a clean cut and comely variety. This is associated with their usefulness; and no breeder speaks of one without coupling it with the other, as, by common consent, they are pronounced a handsome variety of fowls. In the show-room or on the green lawn they are pretty and attractive. White breeds having been comparatively rare until the past decade, the color is always pleasing to the beholder, whether he breeds fowls or not; and the only reason that can be given now for the sudden change of mind in breeding and booming white varieties is, that they have become popular among the people, by reason of fanciers catering to the tastes of the masses. The rich, red comb, like a full blown rose, growing on the head, red face, ear-lobes and pendant wattles, contrasting with a white plumage and yellow legs, is both pleasing and attractive.

White fowls have figured in ancient history and tradition. Plutarch informs us, that a white cock was always sacrificed to Anubis, the ruler of the upper world, and a saffron or brimstone colored cock to the same god, under the name Hermanubis, as ruler of the under world ; so in the Voluspa, the oldest part of the Edda, the golden-combed cock was the symbol of light chants in Valhalla, and the demoniac black cock in the halls of Hell; and popular legends made a similar distinction between the white, saffron, red and black cocks.

In that wonderful work by Flaubert, "Salammbo," quoted in Burchard's "Volumen Decretorum," descriptive of the siege of Carthage, the author introduces the white and black cocks as indicative of the way in which they were then regarded. Speaking of the city, he says, that "The white cocks, consecrated to the sun, crowed on the terraces;" and in describing the priest Schababarim, says, that "with his face covered with a veil, and waving torches, he had cast a black cock on a fire of Sandarack, before the breast of the sphinx—father of the terror."

The white plumage is much in favor of this variety for market purposes. The color does not make the flesh more tender, succulent, or better flavored, but it improves the appearance of the carcass when dressed; the pin feathers, being nearly the color of the flesh, are scarcely discernible. They have a nice yellow skin, a color highly prized by cooks and housekeepers and, of course, dealers in

poultry. Outward appearance has much to do with making a favorable impression, and if the mind be satisfied with such impressions, the taste usually becomes subservient to them, and defects are not criticised so closely. However, there is little cause for finding fault with the White Wyandottes on the score of nice flesh and toothsome eating, and though color of skin is of little value by itself, in close competition for general favor, every little advantage, magnified, counts in the long run.

Like all new varieties, there is yet much to be perfected before the White can poise as an ideal fowl. Breeders must reject every poor specimen in their own yards, and reject every specimen which comes from unknown yards, and all which have not the characteristics of pure White Wyandottes. The White Wyandotte is a true Wyandotte in type, carriage, facial appendages, size, egg production, quality of flesh, general characteristics, and even the size and shade of eggs. Therefore, it behooves the reliable breeder to adhere closely to pure Wyandotte blood, encouraging the crossing of families from pure stock, and all join to perfect and establish this variety on a sure and solid foundation. When this will have been attained, the Whites will rapidly approach reliability, and it is certain that their breeders will be amply rewarded when the variety is, like Cæsar's wife, "above suspicion."

WHAT OTHERS SAY.—Mr. I. K. Felch is unstinted in his praise of White Wyandottes, and reviews this variety when comparatively young: "At no time has there been such apparent appreciation of a breed, as has signalized that for the White Wyandottes, many families coming positively white in plumage, while their peculiar shape is fine for the broiler, being a plump chick from the age of four weeks old upwards. There is no moment of its life when it is not a fit broiler under four months old, nor that it is not a nice roaster up to seven months of age; it is just simply a matter of size. Even at five weeks old they broil into a plump, quail-like shape, and, broiled on toast, are much in flavor like '*quail de boulerd;*' they will often take the place of the genuine article, many a time with perfect satisfaction to the epicure, while waiting for the open season for that bird. We have tried them, and must say that a fat five-weeks-old White Wyandotte chicken, broiled on toast, is one of the greatest luxuries of the poultry-yard. The white plumage makes the poultry look clean and nice; no black disfigurement caused by dark pin feathers. Then, for beauty in the show-pen, tell us of a more beautiful sight. * * * Surely, there is exhibition

merit here, and beauty enough to satisfy any lover of the fowl race. This breed is fast becoming a producer of brown eggs of fair size; the demand for brown eggs is doing more to protect them from Leghorn crosses, than all other efforts put together. We bespeak for them a large share of popular favor, and, from the ranks of all lovers of poultry who are forced to make their selections from the breeds that do the best toward paying a profit, they will make no mistake in their affections for, and the keeping of, a flock of White Wyandottes."

Mr. J. H. Drevenstedt says: "As to table qualities, we know by the voice of our customers that the Wyandotte is preferred. We except nothing but the Houdan-Brahma cross, which is unexcelled for the table, but not attractive for market. Brahmas are excellent when nearly full grown, but do not dress as plump and nice when young, as the Wyandottes or Plymouth Rocks. As broilers, the latter are certainly excellent, but a recent trial with White Leghorns convinces us that this little breed is of unusual value for early broilers, and we are indebted to P. H. Jacobs for this suggestion. For spring chickens, sold in late summer and fall, we claim the Wyandotte the best of all. They will dress six to seven pounds, and carry more lean meat on breast and back, and have less offal, than any other American breed. The Plymouth Rock is inclined to fatten too readily, and a two-year-old Rock is a lump of fat, and can be compared to the Essex breed of hogs—fine and sleek, but a lard deposit. The Wyandotte is, among fowls, what the Berkshire is among swine. It is the Dorking of America. Improve these table qualities, and the already superior laying qualities, by constant and proper selection, and we Wyandotte breeders need look no further for a better fowl. Being a strong admirer of this breed, and thoroughly satisfied with its superiority, we simply put in our protest to Mr. S.'s statements, and trust that neither he nor other breeders will consider their favorites unjustly criticised, as it is far from our intention to disparage the claims of other meritorious breeds."

Mr. J. Penfold Field, author of "The Wyandotte Fowl," a small English work referred to before, says: "In my own yards I have many Wyandottes that have never become broody, and it would be an easy matter, if one desired it, to produce a non-sitting strain.

"They are *par excellence* the farmer's fowls, and it is really a pity to note how very few the farms are on which they exist; and I am doubtful if it will not be years before farmers take any appreciable notice of them.

"It is a fact worth noticing that, after all the years the Plymouth Rock has been in this country, the British farmer is only just awakening to the merits of that variety. Let us hope for a quicker and better future for 'our pets.'

"For quick growth and early maturity, they are only beaten by the Leghorn. This point, alone, is a very great consideration in a monetary sense.

"As egg-producers, they are better than many of the non-sitting breeds, the average being fully 170 eggs per annum, and some thirty odd hens, in the season of 1887–8, averaged 180, the Whites showing a little ahead of the Silvers. I have kept Minorcas, Red Caps, Andalusians and Leghorns, all at the same time, and under similar conditions, and I can only truly say that the latter have beaten them. A few Andalusians I found equal to the Leghorns, but the greater number made an inferior show. In days gone by the Andalusian laid extremely well, but I am afraid that, through the system of breeding adopted, its useful qualities are lost, with the exception of a very few strains.

"The Minorca and the Red Cap, although very fair layers, I never found equal to what has been claimed for them, and they are assuredly no better than the Wyandotte."

The author has appended a foot note after the preceding paragraph, as follows: "Mr. Charles G. Baker, writing of Silvers and Goldens, says, 'I have kept a good many sorts in my time, and I never kept better layers all the year round, and they are a good table fowl of a nice flavor.'"

Concerning *White Wyandottes*, the Rev. Harold Burton, who makes them a specialty, writes: "I know they are very good layers; they run wild on unlimited grass, go just where they like, and are only fed when let out in the morning and shut up at night; I am well pleased with them as useful, all round fowls, capital eating, excellent layers, first rate sitters and mothers, hardy, cheap to keep, tame and gentle to handle, yet lively and active; very pretty, too."

Breeders are almost unanimous in declaring "It is the finest all round fowl ever yet seen; an unequaled egg producer among the sitting varieties; unsurpassed as a table bird for rapidity of growth and quality of its meat; small boned, plump and not overwhelmed with noxious fat, and one that, with proper treatment, is always ready, even for a connoisseur's table, without any system of artificial fattening. Moreover, it is hardy, easily reared, and is the breed of all others from which to select hens for hatching and raising chick-

ens. No hens will sit steadier or become more quiet and careful mothers than the Wyandottes."

DESCRIPTION.

The White Wyandotte is a self-colored variety, and must conform to the standard for other varieties of the breed, save color. The American standard for judging White Wyandottes is accepted by the English Club.

THE MALE.—The head is short and broad on crown; plumage pure white; eyes, comb, ear-lobes, face and wattles the same as other Wyandotte varieties; the beak is yellow.

Neck, is the same in form and arch; plumage, pure white. Back, short and broad, like the Laced varieties; plumage, pure white. Breast, full and round; plumage, pure white. Body, the same as in other varieties; plumage, pure white. Fluff, full, abundant and downy-like. Wings, medium size and pure white in color. Tail, the same as in other varieties of the breed and white in color. Legs and toes, the same as in the Laced fowls; color of legs, bright yellow.

THE FEMALE.—The head is short and broad on crown; plumage, pure white; eyes, comb, ear-lobes, face and wattles the same as in the Laced varieties; the beak is yellow.

Neck, is the same in form and arch; plumage, pure white. Back, short and broad; plumage, pure white. Breast, full and round; plumage, pure white. Body, the same as in Laced; plumage, pure white. Fluff, the same. Wings, medium size and pure white in color. Tail, the same as in other Wyandotte varieties, and white in color. Legs and toes, the same as in the Laced variety; color of legs, bright yellow.

Standard weights are the same as for other varieties.

Disqualifications are the same throughout, except the last clause, which should be, "feathers other than white in any part of the plumage."

REMARKS.

It may seem unjust that the White Wyandottes should be subject to like cuts, and the same points allotted in the various sections with the Laced varieties, as there is no marking to breed for; but on second consideration, the breeder will find that this is meant to do justice to all, without giving special advantage to one variety above the other. At first one is apt to overlook that the Whites fail in color

from the expressed term of the standard—*pure white*—and this failing almost always extends to under-color. We forget that this variety has a yellow skin, as well as yellow legs, and that this yellow pigment is strong enough to dye certain portions of the plumage yellow, straw, or reddish, which comes more or less on the surface of the greater number of this variety.

The color faults consist in the shadings from pure white to yellow. If we are to have pure White Wyandottes, we do not want them with yellow or bleached plumage. A sunburnt plumage is not a yellow one, and a bleached plumage is not a pure white one. Perfection of color is just as much of a *desideratum*, and should be as highly prized as shades, pencilings, lacings and barrings in a particolored variety. Whites should be much easier to breed, and should come truer to type than the Laced varieties; but even with this advantage and the fact of many females scoring two or three points higher than the other varieties, and also some of the males gaining a point or two over their cousins, we must cut in accordance with the value of pure white. The straw, or reddish brick color, will show upon the surface of neck, back, primaries, secondaries and sickles, and the cuts in each section will range from one-half to one and a half points.

In some strains, the frequency of yellow quills is so prevalent that it seems to be "dyed in the wool," or, in other words, constitutional. Such serious faults may be so aggravated that dark color may show in both wings, to disqualify the specimen. Notwithstanding the advantages of a self-colored variety like the Whites, the yellow shading on neck will be cut one-half to two points; on back, one-half to two points; on breast, one-half to one point; on body, one-half to one point; on wings, yellow feather one-half point, yellow shading and quills one-half to three points; on tail, yellow in webs one-half to one and a half points, in quills one-half to two points; in legs and feet, other than yellow, or faded from bright yellow, one-half to three points. Thus it is seen that these possible cuts will reduce the number of specimens which the casual observer, or young amateur, thinks worthy of a much higher score than their Laced cousins, and the number of Whites which will score over 91 or 92 honest points, will not be so large as one would expect from a self-colored variety.

Every breeder of white fowls with yellow legs and skin, knows the difficulty of breeding them with pure white plumage; some contend that a "blossomy white" plumage cannot be maintained on

such varieties except at the expense of health and close confinement under shade. If these obstacles did not exist, there would be no incentive to the exercise of skill, and white varieties would always be the winning birds. What is usually pronounced white, may be severely cut for the absence of the shade of white which judges deem pure. Mr. Felch says: "In all living shades of white, oil and white-lead paint is a good standard, cutting for shading as white till it becomes yellow, when the plumage becomes foreign to the breed. The exception to this is when plumage becomes burned by the sun and weather. This can be determined by lifting the plumage and seeing what it is where it has not been exposed, and to see if the quills are yellow also. If the quill be yellow where not exposed, we must consider that the sun is not the whole cause of the foreign color." This is a very practical illustration and one that can be easily kept in mind. White fowls should have plenty of shade trees on their runs, as exposure to a blistering sun and neglect of selection in the breeding pens, would eventually change the plumage from pure white to cream color, light buff, yellow or straw color; and we would be safe in saying that they would in time revert to the pristine color of the ancestors.

MATING AND JUDGING.

As there is only one color to select from in a flock of White Wyandottes, after fine shape, vigorous constitution, sound limbs and standard head and appendages, one must look to the purity of the white and its richness in gloss as an indication of rich blood and sound health. A pale white, like the lily, without sun and light, should be avoided. The male having a richer, deeper or stronger tinge to his plumage, though it be white, black or buff, will transmit the purity or impurity of his color, as a rule, in a greater degree than the female with which he is mated; so it behooves the breeder to look sharply at color and not mate anything but white, both in web and shaft. If this cannot be obtained in the females, too, and they show yellowish tinge and yellow quills, the male must be white. It will not be proper mating to put together males and females with yellow on surface or quill, bad as it is to be obliged to use one or the other with a mate whose plumage is white to counteract the yellow; but when males and females are faulty in color, it is out of the question to expect pure white plumage in the offspring. The female progeny, from an opposite mating, coming all white, may be

used with a pure white male, but there is no dependence on the males from such a mating.

As we have already mentioned the defects in color and the usual cuts for the same, the want of space will not permit us to take up the question again. We hope that our suggestions have been sufficiently full and clear to assist the amateur fancier in mating and judging, as all the hints expressed or implied on the Laced varieties, can with profit be taken and applied to the self-colored varieties.

PREPARING WYANDOTTES FOR EXHIBITION.

Since the era of poultry shows, many exhibitors wash and otherwise prepare their birds so that they will attract the eye of the judge, show to better advantage and score higher, by being in a more presentable condition. This practice originated in England, and it was found in some cases necessary, owing to so much smoke from coal, which entirely blackened the plumage of white fowls raised in cities. A clean plumage, face, comb, wattles and legs, look pleasing to judge and observer, and make a favorable impression in comparison judging.

A fowl needs to be in good health to show a rich plumage, and when in good condition of flesh, without being fat, the plumage is more abundant. The severity of our winters, just about the time of our exhibitions, has deterred many exhibitors from washing their show birds for fear of their taking cold and bringing on roup during exhibition. The process is simple enough, when properly done; but in the case of white or light colored birds, it requires more care, skill and patience.

The best way to remove dirt and stains from the plumage is by clean, white or transparent soap, that is free from much alkali. Have two tubs in readiness, one larger than the other, and fill the smaller one with about three inches of warm water; cut up for one bird about half a pound of white soap, and make a strong lather in the tub; stand the bird in the lather and wash it, using a softish hair brush, and your hand; thoroughly brush and cleanse the feathers everywhere, making sure that your strokes are downwards, from head to tail, and not up and down, as that would ruffle the feathers. This done, having prepared warm water in the larger tub, dip the bird in and out, and at the same time stroke the feathers down, to get out every vestige of the suds. If the shanks are very

dirty between the scales, it may be necessary to use a nail or old tooth brush to cleanse them. When the feathers are perfectly free of soap, take a can of lukewarm water, with a little bluing in it to give it color, and pour it over the bird, drain and dry as quickly as possible, using a towel and then the brush, to smooth and arrange the feathers; turning the bird all the while around to the open fire or open grate of the stove, so that it will dry quickly. It must not, however, be too close to the fire, as it might crisp or curl the feathers. The bluing can be dispensed with when there is no white fowl to be washed.

The hand and brush must finish the work; the legs and head briskly rubbed with a little alcohol, and, while the bird is still damp, give it a little brandy or whiskey in a teaspoonful of water, to revive and prevent it taking cold. As the bird dries and fluffs out, gradually draw away from the fire; leave the birds all night in a warm kitchen, but, when dry, feed them some stimulating food. Bathe the legs next day with a mixture of alcohol and olive oil, as it will freshen, brighten and keep the skin from cracking.

Next day place them in their own preparing pen, with several inches of cut rye straw, into which scatter wheat for them to scratch and get agreeable exercise; let them rest one or two days before their journey, lest they take cold on sudden exposure. Hard feathered and parti-colored breeds do not need as much washing as White Wyandottes, White Plymouth Rocks and White Cochins. Both the washing room and sleeping apartment need agreeable warmth to avoid risk of taking cold during and after the operation. When the plumage is dry, a second brushing and combing of the feathers may be necessary.

Of course, it is understood that the birds intended for exhibition should be fed on certain kinds of food for several weeks to get them in proper condition. A mess of barley and buckwheat for breakfast; vegetables, boiled rice and milk, with a handful of brown sugar stirred in, or corn meal pudding and milk for dinner; a handful of hemp seed and sunflower seed for three or four hens or cockerels in the afternoon, and late in the evening a supper of sound wheat and corn.

PART FIFTH.

MANAGEMENT, CARE AND FEEDING.

MANAGEMENT.

"Nothing succeeds like success" is a true saying, and nothing is of greater importance to the beginner than the knack of good management, coupled with industry. It is well that every poultryman should know that good management is as much needed in the pursuit of poultry keeping as it is in any other namable business. Do not think, for a moment, that poultry culture is too small or too trifling to not need management; for if you do, and allow your fowls to manage themselves according to their own "sweet will," you will be sure to get small returns from them, while they will be a source of much expense in houses, appurtenances and feed.

But, you may ask, what is this management you lay so much stress on? Management has a wide signification, and which we must summarize here. It consists, when one makes up his mind to engage in poultry culture for profit, to slowly, deliberately and cautiously think over his love and adaptation for such business; the size and situation of his place; whether there would be necessity for keeping his fowls constantly confined on account of close neighbors or other causes; the proximity to a city, or good market by railroad, not far away, and the well studied and best liked choice, whether to breed high class thoroughbreds for fancy prices, or graded or cross-bred fowls for market.

If one prefers thoroughbreds, it is good management to start with a prime, healthy and salable breed, one that he likes and would take much interest in, and give them the proper care needed. If his choice is to cater to the open market, and to supply hotels, res-

taurants and private families, it is good management to start with such breeds as will be first class layers and first class table fowls, in order to supply customers with fresh eggs and fowl flesh regularly.

Wyandottes are eminently adapted for both purposes. There is not a breed or family in the Standard that is more popular at present. The fancier is sure of ready sale and fair prices, as there is a large field to be supplied, and they are growing in public favor as they are growing older. The Whites stand at the head for table use, either as broilers or roasters, and the addition of a flock of White Leghorns would complete a select stock for market.

Good management is seen in the situation, site, make, plainness and internal arrangements of the fowl houses and runs. It is seen in whether one could utilize the runs for vegetables, fruit trees, vines or berries every second year by using double runs, or annually by single ones. It is seen in the internal arrangements of the fowl houses, for divisions and sleeping places; each small flock of a dozen forming a little colony by themselves. It is seen in the arrangement of laying nests, baths, sitting places, and nurseries for early broods. It is seen in the ability for making contracts for eggs and fowls throughout the year, and in filling such contracts. It is seen in the system of packing eggs when cheap and making sales when dear. It is seen in the purchasing of grain, roots and vegetables from farmers early in the fall when they are cheap, or, better yet, if one could raise the different kinds of food for his stock without buying them. It is seen in taking advantage of the markets when prices rule high, and in having broods mature for a succession of eggs, or in a stage of development for sale early or late in the season, when there is no glut of fowls or eggs in market; and, lastly, it is seen in the system, regularity and punctuality of doing business.

Now in the matter of thoroughbred culture, all the foregoing qualities are essential in the fancier, and in the carrying out of his business. In addition, he should have a good knowledge of the characteristics of the breed he cultivates, and the most judicious ways of breeding, feeding and raising prime, young stock for sale; and the most judicious way of selling them to good advantage early in the fall, so as to avoid building extra quarters and feeding a large surplus stock through the winter and endangering their health. Good management is seen in judicious advertising. Not that one should advertise in every poultry publication, but in one or more well established and first class journals, like the MONTHLY, which has a large and bona fide circulation. The advertising should not

be spasmodic—now and then, when trade is lively, but steady advertising while in business; not necessarily occupying large space, but neat, to the point, and truthful in all respects. Honesty in dealing, doing as you wish to be done by; making no false statements; keeping first class stock and selling at fair prices, according to quality, will eventually bring success and establish a name for reliability.

CARE.

ATTENTION TO DETAILS.—To attain high rank as a breeder and success as a business man, one must give attention to details. We remember that success is not accidental, but is attained after years of good management, industry and attention to business. The amateur does not usually think over the obstacles before him, and complacently looks at the success which crowns the efforts of veteran fanciers in a different light, and attributes this success not to the labors of years or close attention to business, but rather to the luck of breeding some popular varieties and of bringing them prominently before the people.

What is the object of keeping poultry if one does not attend to their wants and get something in return for his care, time and outlay? Some start out with good intentions, but never put them in practice. What is the use of buying first class stock and neglect them afterwards? All our improved breeds must be kept up to the highest condition year after year, or they will deteriorate more rapidly than they have improved. We may say, we are fond of fowls, like to see them around us, and all that, but when it comes to feeding and caring for them regularly, making their quarters comfortable and clean, we are apt to become careless and shamefully allow the poor birds to suffer from hunger and disease through our negligence.

ECONOMY.—There is nothing like economy in the transaction of business, as it makes up for many little drawbacks of the head and hand in our efforts through life. It bridges the gulf which divides poverty and wealth, and aids the inexperienced poulterer to raise fowls without wasting food, and in making use of different kinds of food by mixing and cooking, saving the most costly by substituting other kinds better adapted for fowls. It curbs imaginative ideas of profit and expenditure, and its practice is usually rewarded by a sure and safe living on the earnings or profits of one's pursuit.

Economy and good management will prop the poultryman up

when at the point of staggering from other causes. It will be a vast help to him in the absence of experience. It will suggest to him that old fowls are not profitable, that the days of their usefulness have passed, and that the longer they are kept the worse they will be getting and the greater the bill of expense. If you want to make a profit on fowl stock, keep no hen after she passes her third year, except she is an extraordinarily well marked bird, or has some other valuable quality; and if breeding for market, two-year old hens should be fattened and sold in the fall before moulting. If one labors to procure means of support and something to lay by for old age or pressing necessity, it is a poor plan to keep a lot of old hens which lay one day and rest six; which have not enough ambition to lose sight of the corn crib; which, as a rule, are diseased in some way; are lousy and lazy, with huge bunches on their legs, or bagging down behind from fat or old tumors in the oviduct, and whose flesh would be as tough as that of a rhinoceros.

Care has much to do with making fowls profitable and also improving their looks. No one should take on himself the responsibility and guardianship of fowls without giving them needed care. Food will give nourishment, repair the wastes of the system, enrich the blood, furnish the material for eggs and nutriment for growth and flesh; but if the birds be neglected, have poor and illy ventilated quarters, damp and unclean sleeping places or yards, the quantity or quality of the food fed to them will not counteract the effects of bad care. Care, however, does not imply that they should be stuffed like a bolster, or coddled by over zeal or mistaken kindness; care is that which bestows with a kind hand an adequate supply for their wants.

CLEANLINESS.—This is the most important duty in the routine of care, and we cannot too strongly impress its observance on the breeder. It matters not how good the stock may be in the beginning, how well they may be fed, if scrupulous cleanliness be not observed, all goes for nothing. There is no dodging or avoiding the effects of uncleanliness; all the condition powders, elixirs, or chicken nostrums in existence cannot keep a flock of fowls in good health and laying condition while they eat, scratch, wallow and remain day or night in a foul smelling house and "up to their knees" in their own fetid droppings. If one has a heart in the right place, and is a lover of cleanliness and tidiness, he will not allow filth to accumulate in the houses or runs. Many a sickly hen, many which have ceased laying, and many an emaciated and piping chicken, can lawfully

curse uncleanliness for the lice and constitutional diseases which it has brought on.

EXERCISE.—This may seem of little importance to the young beginner, and yet, it is essential to health. Inertness will favor obesity, and obesity is antagonistic to fecundity. Fowls which do not take proper exercise, will decrease in egg production, and no dependence can be placed on them as stock-getters. In cold weather, and when being confined, exercise is doubly necessary, as it stirs the blood to a freer circulation, strengthens the muscles, gives a healthy appetite, draws away their attention from feather plucking and egg eating, and improves all their physical qualities. Nature has designed more or less exercise for every organic thing, in order to promote endurance, hardiness, development, keen appetite, good health and fecundity.

OVERCROWDING.—The evils of overcrowding fowls in houses or runs are greater than the average breeder is aware of. Fowls will not bear to be crowded; it matters not how thrifty they may be in small flocks, when massed, they will show, by their looks and decrease of egg production, the effects of overcrowding. The males will lose their natural vigor and sexual propensities, and the females will become pale, dumpish and sickly. The affluvia from their feathers and digestive channels mix with the air they breathe, and, this repeated every moment during day and night, poisons the blood, and lays the foundation of cholera and other dangerous diseases. Vermin are also to be dreaded in a filthy and overcrowded hennery, and, if you value your fowls, and your reputation, never overcrowd your houses, or you will be the sufferer. Cleanliness will do a great deal to avert rapid decimation, but it cannot save all, and there is nothing more certain than that sickness, death, lice and decrease of eggs will follow the massing of a large number of fowls in one place.

HATCHING AND REARING OF CHICKENS.

Most all beginners in chicken culture think this is simple, and needs no previous experience. They begin with the assurance that there is no knack in making a nest, depositing eleven or thirteen eggs, and placing a broody hen over them. The hen becomes broody of her own accord, and will set three weeks if not disturbed; the chicks will come out in due time, and thoroughbreds will reproduce themselves, so it does not matter whether one is skilled or not, the chicks come all the same. A little cornmeal dough in the

beginning, and, later on, cracked corn and wheat, so that, as the chicks grow older they will be able to provide partly for themselves, and partake of the fare given to old fowls.

HATCHING.—Such ideas as the above are common to novices. It is advisable to save the eggs from your best laying hens, in preference to those laid by pullets Select the largest and best shaped of the medium-sized eggs, those with a smooth shell and fresh looking in color. When one of your hens manifests a desire to sit, after remaining on the nest when her companions go to roost, put a nest egg under her and allow her freedom to act. If she proves true to her duty, make a nest in a secluded place away from other hens, fashion the nest and surroundings as much like the old one as possible, and move her at night quietly and tenderly, with the nest egg. If she shows business on the new nest after a day, she may be trusted with valuable eggs. Hens are usually steadier sitters than pullets.

There are signs by which the novice may be able to tell whether the broody hen means business or not; steady laying for some time previous to clucking, remaining on the nest over night, holding possession of the nest against the attacks of the hens, screaming and drawing the head in with the erection of feathers on the head and neck, pecking one's hand when touching her, throwing straw towards her back, shuffling her legs to get a steady pressure for her feet, and when done give out a few notes of contentment and solicitude, in the same key as when brooding the chickens at night after being disturbed.

FEEDING.

FEEDING CHICKENS.—Next to warmth and proper brooding, which is so essential to young chicks after being hatched, is generous and judicious feeding. Remember that your brood came from warm tenements, living and breathing at 104° Fah., and now the atmosphere about them is perhaps thirty, forty, fifty or sixty degrees lower. This is wrong; this is not proper care. Cold checks nutrition; the food absorbed when leaving the shell is not assimilated while suffering from such a rapid change of temperature. Many of the ailments common to chickenhood could be traced to this lowering of the temperature after being hatched, for there is a check on nutrition below 75° Fah.

The first week, hard boiled egg and stale wheat bread crumbs, or pulverized crackers, half and half, and before mixing them pour

scalded milk on the bread; drain off and mix with the egg and place it on a sheet of brown paper. A crumb may be put into a saucer of milk to attract their eye and learn them to drink by pecking at the crumb. Give them cracker and a little of the chopped egg; another time, a little egg and dry oatmeal, and scalded milk at all times. After a week dispense with the egg, but continue the bread crumbs and milk, johnny cake, dry oatmeal, broken wheat, millet seed, cottage cheese, cut onions, fine bits of boiled meat and such like, as would be suitable to their digestive organs. Some sharp sand in front of the coop, and some loose earth for scratching, will also be necessary after the first week. The food may be varied as they grow older, and coarser and cheaper food gradually substituted until they can partake of the usual fare for adult fowls.

FEEDING THE ADULT FOWLS.—"Variety is the spice of life," and the good effects of variety of food is apparent in the flock. There is altogether too much corn fed to fowls. Barley, oats, buckwheat and wheat are much better for young and old birds than a regimen of corn. Corn is lacking in mineral and albumen components; it is too heating and drying to both blood and tissue. It is poor food for young chicks when mixed with cold water; when scalded and made friable, a mess once in a while will be in place, or if boiled to a pudding consistency and seasoned, it is good for young or old.

Fowls should have plenty of coarse stuff with grain. Bran and middlings, barley meal, oats and corn ground, vegetables and roots, scraps of meat, slaughter house offal, especially blood, fresh clover, wheat and buckwheat for the laying hens; corn and corn meal pudding and other fat-producing food for market poultry. If the substance contains nitrogen, it is most fitted for the nourishment of tissue and is called plastic or nitrogenous; if it is deficient in nitrogen and has an excess of carbon or hydrogen, it appears to undergo combustion in the body, and is called hydrogenous, or respiratory element of food (hydro-carbon); if it is fatty in its nature, it performs the double duty of maintaining animal warmth and assisting in the assimilation of nitrogenous compounds, and if it is saline in its quality, it goes to build up the solid textures of the animal frame, and aids the important work of carrying new materials into the system, and old or effete matter out of it.

Grain and green food in variety, will do a great deal towards giving a bountiful supply of eggs in mild seasons; but with the addition of animal food in moderate quantity, the number

will be increased. The best way to supply fowls with wholesome food at little cost is to procure slaughter-house pieces, those which are coarse and bloody, which can be had for little or nothing. Chop them up fine, bones and all; put them in a boiler and fill with water; when thoroughly cooked, so the flesh will easily fall from the bones, then stir in some ground oats, corn and barley, or either in the form of meal alone, if the whole cannot be conveniently found at the mills or feed stores. Keep stirring and cooking till it becomes thick as mush; season with salt and pepper; pour the mess into pans or jars and put away in a cool place, if there is too much for a day's feed, while for present use it is more relished if fed agreeably warm to the fowls. This is an excellent mixture for young or old, for flesh or eggs, and besides being wholesome and nutritious, it is less expensive than grain.

Housing Fowls.

There is no necessity for elaborate and expensive houses for fowls, as they do not make the inmates any better. A palace or hovel is the same to the hens, and there is only one excuse for building costly houses, and that is, a man of wealth, or fancier of means, who, having a handsome residence and pleasant surroundings, does not like to mar his home by putting up a cheap and common-looking hennery in their midst. Those who are well to do in the world's goods may satisfy their taste, but nothing more than a plain, commodious and comfortable house is required for the majority engaged in poultry culture.

The situation of a house has much to do with its health and comfort. It should be erected on the highest piece of ground convenient, and if there is no choice, the site should be filled up with sand and loam so it would be eighteen inches or two feet above the outside, to prevent rain and dampness affecting the inside. One cannot lay down rules that will suit individual cases, and only in a general way can we suggest what to do. We prefer small houses and each one its own assigned run, and each run utilized with fruit trees, shrubbery, root crops or grain, to lessen the expense and rid it of its deleterious accumulations. One should plan before building how to make double runs, so that the fowls could be readily changed from one to the other while the crops are growing and ripening.

Every run should have enough of permanent grass and clover for the fowls. Each house or division of house large enough for a dozen hens. The fencing should be arranged on one set of runs, so it could be taken down and put up with ease. This can be done by the use of sections, say twelve feet long, and the use of hooks and staples to the posts. This would facilitate the ploughing or the making of temporary new runs. If breeding for market is the main

object, less fencing would be needed, as small flocks of one breed could run together at large, if the crops stand no danger of being injured by their having liberty. This and other points must be considered by the breeder, and his own good sense will suggest what is best to do.

We prefer fresh earth and road dust for floors and baths, in preference to wooden floors. The fowls will like it better and it is more natural and healthful. It should always be loose, and once or twice a week a close rake drawn through will gather the droppings, and the constant scratching will cover the fresh droppings and prevent the liberation of ammonia to a certain extent. The baths should be of dry road dust and placed where the sun shines on them. The perches for Wyandottes should not exceed three feet high, and they should be about three or four inches wide, beveled, or, in other words, rounding in the middle, with edges taken off so that the form will fit to the hollow of the feet when the claws have grasped the perch; two by four scantling, rounded off, make a solid perch.

A good plan when putting up perches is to have them rest on half cups of cast iron, in which kerosene may every few weeks be put, to permeate through the pores of the wood, to keep lice and parasites away, and they should be on a level and far enough apart to prevent the fowls from pecking at each other from the perches. A feeding box for each small flock is a great saving, besides keeping the food clean and away from rats and mice. Oyster shells, ground bone, old mortar and slacked lime, charcoal or charred corn, sharp gravel and a water fountain, are indispensable in every house whether you are breeding high class or market fowls.

PART SEVENTH.

Diseases and Treatment.

Cholera.—This disease is aptly called the "scourge of the poultry yard," and in truth it is the most rapid and fatal of the ills to which fowls are subject. A bird which becomes a prey to cholera is nerveless, staggers and carries its wings drooped; its feathers are ruffled, head drawn in, and it is overcome with intense drowsiness. The bird has no desire for food, drinks a great deal, a severe diarrhœa sets in from the beginning, the evacuations are thin, yellowish in color, and later, a mixture of sulphur color and green, quite frothy in appearance. Sometimes death follows in one day, and again the bird may live two or three days and perhaps longer.

There has been no specific discovered for cholera, as the cause does not proceed from a disarrangement of the system, but is due directly to the presence of *microbes*, which are similar to the species which cause cholera in man and swine. Of course, when the system is impure, lowered in vitality and disarranged from one cause or another, it invites disease as it is favorable for those infinitesimal or microscopic animals, to attack both the blood and vital organs. Enteritis or inflammation of the bowels is often taken for cholera, but there is a congestion of blood about the head in cholera which turns the face, comb and wattles purple, which is unusual in enteritis.

This disease calls for active and heroic treatment. The sick birds must be moved away from the flock. Give calomel and blue mass in two grain doses, or four grains of blue mass mixed with two grains each of gum camphor, cayenne pepper and rhubarb, divided into four parts—one to be taken every four hours. Another remedy

always handy and quite successful, is kerosene. Mix one teaspoonful of kerosene, a little butter, a pinch of red pepper, some garlic and enough of flour to make six pills; give one every two hours. If the garlic is inconvenient, do without it. Six drops of kerosene in a teaspoonful of scalded milk is excellent; or kerosene mixed with bread, meal or flour and made into boluses, one every hour or two, will serve the same purpose on a pinch. Six drops of carbolic acid in a teaspoonful of scalded milk is a good remedy; four drops of chlorodyne in a half teaspoonful of water every two hours is a splendid remedy.

ROUP.—This disease is common, and usually proceeds from a cold in the head, like catarrh, if not taken from another fowl. It shows from a running at the nostrils, watery eyes and difficult breathing. When first taken, five drops of the tincture of aconite in a teaspoonful of water twice a day will cure it. The aconite may be given on pieces of bread, but mixing with some liquid is better. Get one ounce of camphorated oil and put five or six drops of crude carbolic acid in it, and inject this mixture into the nostrils twice a day with a sewing machine oil can, or work it in with a feather holding the head back at the same time, if you have no can. A solution of carbolic acid, say one of acid to thirty of water, injected in the same way, will answer. If the disease becomes severe and bad smelling, wash the face and nostrils with castile soap and warm water; press all the matter out of the nostrils and have ready at the same time, in a bottle, equal parts of sugar of lead, pulverized alum and enough of acetic acid to make the mixture about the thickness of cream; if the acid cannot be got handy, use the same amount of old cider vinegar in its place, be sure it is cider vinegar, but if the acetic acid is handy, use it. Now inject some of this mixture into the nostrils as above directed, but in the absence of a can, work it in with a feather, this will cure roup if applied properly. Do this twice a day in very bad cases, once a day in ordinary cases. It is the mucous membranes of the nostrils and orifice which are affected and these must be reached by injection or the use of a feather. Two ounces of this mixture will last some time for roup cases. Of course the sick birds must be separated from others and fed on soft food. Be sure to wash the face and nostrils clean once or twice a day, or the virus of the matter will poison the face and eyes and cause lumps and blindness.

DIPHTHERIA.—This is a malignant and infectious disease. The mouth and throat are filled with white viscous fluid, like thick saliva,

with small white ulcers. Diphtheric roup is another form of this disease, characterized by cheesy matter in the throat. Swab the mouth and throat with a mixture of sulphur and perchloride of iron; then paint with the following dressing: carbolic acid one drachm, sulphurous acid three drachms, tincture of perchloride of iron half an ounce, glycerine one-half ounce; dress all the places with this night and morning with a camel hair pencil. Another good remedy is painting the affected spots with a mixture of tannic acid and glycerine, or boracic acid ointment.

DIARRHŒA.—This is too well known to need description. The best remedy for this ailment is four drops of chlorodyne in a teaspoonful of milk every four hours; less number of drops for a chicken. This medicine must not be given carelessly. When the ailment is not too severe, a milder remedy will be found in five grains of powdered chalk, five grains of rhubarb, and three grains of cayenne pepper, divided in four parts, each given every four hours; or in place of this give ten drops of laudanum in a teaspoonful of water twice a day; less quantity for chickens; or a syrup of lactaphosphate of lime in half teaspoonful doses twice a day is beneficial. The chlorodyne is almost a specific for this disease; two drops for a small chicken and increasing to five for an adult bird, and must be given in a little water.

CANKER.—This disease is common to all fowls, but more especially to the Game. The canker should be washed with beef brine, a solution of saltpetre, alum, borax, warm vinegar and such like to destroy the pus. Painting with a mixture of carbolic acid glycerine, or boracic acid ointment, will usually cure it. Other good remedies are as follows: Wash clean till the scab comes off and apply a pinch of burnt alum, or touch it with nitrate of silver, or paint twice daily with perchloride of iron, and then apply the lunar caustic.

GAPES.—This is a very troublesome ailment among chickens, and is caused by the presence of small worms of a cylindrical form, red in color and forked with two unequal branches, and three-fourths of an inch in length. There are many remedies, some quite simple and others tedious and complicated. A very successful remedy is to feed those which have the gapes with a warm mess of corn meal, moistened with milk or boiling water, and to each pint of meal add a teaspoonful of spirits of turpentine. Mix the turpentine with the meal while the meal is dry. If the chickens refuse to eat it, cram some down their throats; mix the turpentine fresh twice

a day. Dipping a feather in spirits of turpentine and twirling it in the bird's throat often cures. The use of a horse hair loop in the same way is beneficial. A gargle composed of carbolic acid one part, water ten parts, and salicylic acid one part; press the gullet of the fowl with thumb and finger so that the mixture will not pass through, then fill the mouth with the gargle and let it remain a moment, then pour it out; place the sick birds in a box and subject them to the fumes of carbolic acid. A mixture of equal parts of sweet oil and turpentine conveyed to the throat by the use of a feather, twisting it about a few times and then withdrawing, is good. A piece of indigo the size of a pea, with a pinch of black pepper, three times a day, is recommended. A pinch of air-slaked lime, blown down the throat, is good. A little kerosene, both internally and externally, has proved valuable. Garlic and asafœtida, singly or combined, are splendid. A pill of gum camphor, or a few drops of a strong solution of camphor has been favorably used. Mix in soft food a pinch of fine tobacco, or a few drops of a solution of tobacco, is also recommended.

SCALY LEGS.—Kerosene or a solution of carbolic acid rubbed under the scales with an old tooth brush will kill these microscopic parasites. An ointment of sulphur and lard applied daily will cure.

BUMBLE FOOT.—This ailment sometimes becomes a hard swelling like a corn, and again festers like a stone bruise or "frog felon," to use a homely phrase. When it settles to a hard corn, the skin must be pared as one would an ordinary corn, and when it is close enough to show blood without drawing it, use lunar caustic to kill the roots. When the lump swells and feels that it contains matter, wait until it ripens, then with a lance or very sharp knife, make two cuts in the form of a cross; squeeze out all the matter and syringe with a solution of carbolic acid, one of acid to thirty of water, once or twice a day; a feather will do in the absence of a syringe. When the pus has been squeezed out, touch the core twice a day with lunar caustic; keep the bird on chaff or cut straw until it heals, and while healing rub on some vaseline. In the beginning a corn may be scattered by painting the spot freely with tincture of iodine.

Concluding Remarks.

We have endeavored to give, in the preceding pages, as much information on Wyandottes as our space would allow. They are collectively a grand race and an honor to American skill. They are as near the breeder's ideal of the long wished for "coming fowl" as it seems possible to produce. With united efforts and a love for the work, they can be brought to a high state of excellence for the show-room and housekeeper, the cottager and farmer, and handsome and useful in a high degree.

It is certain that Wyandottes brought up to a high standard in productiveness and table qualities, beautified in plumage, and kept up to their highest physical attainments, will cause thousands to take up their breeding for pleasure or profit, seeing in them every characteristic essential to a first class breed. Fanciers, too, will make a specialty of one or the whole family, and where there is one now breeding Wyandottes, there will be ten engaged in their culture at the dawn of 1900. Our faint attempts cannot do honor to American enterprise, genius and skill, nor do justice to the class of fowls which our fanciers have evolved and improved; but their work will live after them, and will be more enduring than monuments of granite.

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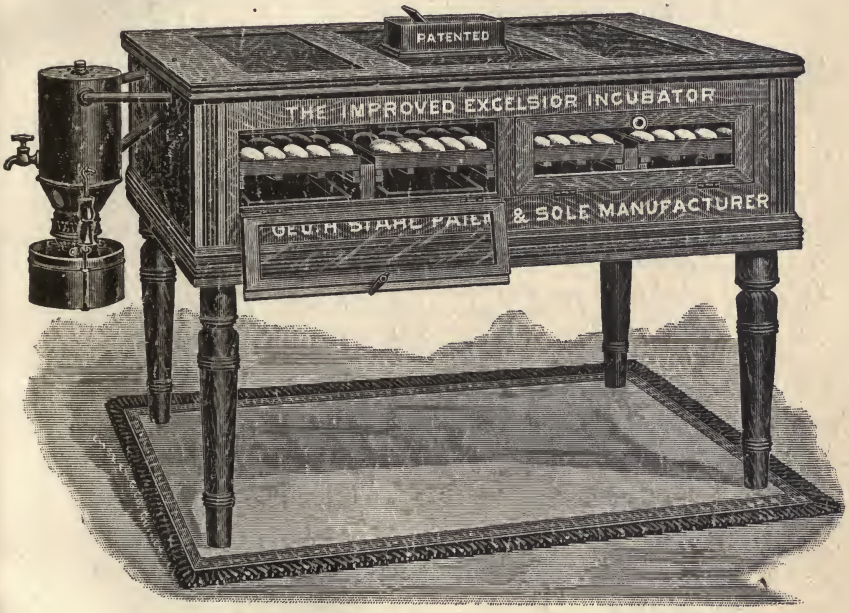

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